THE

Medical and Physical Journal.

VOL. VIII.] SEPTEMBER 1, 1802. [NO. XLIII.

Observations on the Vaccine Inoculation, with an Account of its Progress in Austria, and in the East; communicated by DR. DE CARRO, *of Vienna.*

I Have read in the Medical and Phyfical Journal feveral articles refpecting Vaccination; I make, however, the fame remark on your various papers on the fubject, that I do on thofe which are publifhed on the Continent; that is, I obferve a tirefome uniformity on thofe points of the doctrine which are already quite clear, and little likely to throw light on thofe which are ftill obfcure. What belongs to the veterinary part of the doctrine, has not met with a due degree of attention. I wait with the utmoft impatience for a work which I have feen announced in one of your news-papers; *Some Obfervations on the Origin of the Cow-Pox in the Greafe of Horfes, by* Dr. LOY. I never doubted of Dr. Jenner's affertion, but I always wifhed to fee it put beyond all controverfy. The imperfection of the defcription which the Englifh Vaccinators have hitherto given of the difeafe called *the greafe*, has been the only caufe of the fcarcity of experiments which have been made out of England on that point. I can affure you that there is not as yet a fingle veterinary phyfician on the Continent, who knows precifely what difeafe of the heels of horfes correfponds with the Englifh word *greafe.*

This fubject of the Jennerian doctrine not being attended with any direct advantage, and neither increafing nor diminifhing the income of Vaccinators in general, has been much neglected. But the connection between the Cow-pox and the Rot in fheep begins to make a lively fenfation. The immenfe benefit which proprietors of fheep-farms would draw from fuch a prefervative is fo evident, that the *auri facra fames* will do what love for the fciences would never have done. The fubject is purfued with ardor in France; we have the refults of fome pretty favourable experiments; and lately feveral Hungarian proprietors have began the Vaccination of their fheep, and propofe to expofe them afterwards to the rot by every

every imaginable means. One of theſe experiments is conducted upon a large ſcale; 6,000 lambs are now undergoing the vaccination.

The vaccination of dogs has not yet been ſufficiently attended to, in proportion to the phyſiological importance which is connected with it, if there is any truth in Dr. Jenner's aſſertion of its being the means of producing the diſtemper, and ſecuring dogs from its future attack. Dr. J. has advanced his opinion with his uſual modeſty and accuracy, and whatever be the reſult of his firſt ſuggeſtion, he is in every reſpect ſheltered from any ſort of reproach. I have collected in my ſecond edition all that I knew on the ſubject, and Dr. Valentin's experiments are truly intereſting. Since its publication I have made ſeveral experiments; and upon the whole, this is my opinion on the vaccination of dogs: Some of them, but very few, are ſuſceptible of the true vaccine puſtule, from which matter can be taken to vaccinate human beings; as to the production of catarrhal ſymptoms, I have ſeen them but once diſtinctly; whether the appearance of thoſe ſymptoms and of fever is neceſſary to preſerve a dog from the diſtemper, I am not able to determine. I have not yet met with any proprietor of dogs who would give me full power to make upon thoſe animals all the experiments I have in view. The poſſibility of producing a true Cow-pox, and the impoſſibility of producing the Small-pox upon a dog, conſtitute, however, a point of diſſimilitude in the two diſeaſes, which makes a pretty ſtrong argument in favour of thoſe who contend that the two diſeaſes are different.

Some Engliſh travellers have aſſured me that this aſſertion of Dr. J. has excited the attention of ſeveral gentlemen. Lord Grantham and Lord Brooke, with whom I ſpoke here lately on the ſubject, aſſured me that they had ſeen before their departure from England, the pack of Lord Craven vaccinated, in order to verify Dr. J's ſecond diſcovery. If enlightened proprietors aſſiſt phyſicians in thoſe reſearches, that intereſting ſubject will be ſoon decided.

I am ſorry to read in your Journal ſo few articles upon the hiſtorical part of Vaccination in Europe and other parts of the world. The activity which Continental Phyſicians put to its propagation is in every reſpect truly praiſe-worthy. Almoſt every Government has given its ſanction to it. Thoſe who have employed experienced Vaccinators have taken excellent ſteps; thoſe who have applied for advice to old Regal Cenſors, Counſellors, &c. have adopted the worſt. If you wiſh to be well informed of all that is going on in the world about Vaccination, you muſt abſolutely read the *Sud-preustisch Schlesiche*

Annalen

Annalen der Ausrottung Pocken Impfung, publiſhed by Dr. Frieſe and Nowack, of Breſlaw. The Hiſtorian of the Vaccination will there find the beſt materials; and I am perfectly ſure that you will draw from them a number of articles which will be very welcome to your Engliſh Readers.

I have had the pleaſure to propagate Vaccination ſo far as Bagdad. You can read a ſhort account of it in the laſt page of my work; and I have received from Mr. Harford Jones, Britiſh Reſident at the Court of his Highneſs the Pacha of Bagdad, the account of the arrival of the Vaccine matter, under every poſſible form, which I had ſent to him along with ſix copies of my ſecond edition. The Vaccination has begun there under the direction of Dr. Short, an Engliſh Phyſician, attached to that miſſion.

I have ſent lately matter to his Eminency Cardinal Conſalvi, Secretary of State to his Holineſs Pius VII. Though in the neighbourhood of Naples, where Dr. Marſhall has introduced the Vaccination, it ſeems that it is not yet adopted at Rome, or that the matter is extinct.

The King of Pruſſia is the firſt crowned head who has ſubmitted his children to the new method. Therefore, you ſee that Dr. Marcus Hers's ſophiſms have not even biaſſed the opinion of his Sovereign.

A law ſuit of the moſt abominable ſort is now going on at Berlin, between a banker of that town and Dr. Wolf. That Phyſician was requeſted by the banker to vaccinate his children. He complied with the requeſt; but inſtead of taking vaccine virus, he took variolous matter of the moſt confluent kind. Thoſe two children died during the inoculation. The parents, aſtoniſhed to ſee ſuch ſymptoms produced by the *vaccination*, made the ſtricteſt inquiry, and traced the evil to its origin. A regular charge was brought againſt that monſter, but I do not yet know the reſult of it. Dr. Wolf, it is ſaid, is a friend of Dr. M. Hers; they are both of the Jewiſh religion; and it is ſaid, that W. wanted to pay his court to H. by producing ſuch ſymptoms as would give ſome weight to Dr. H's aſſertion, that *nothing is to be gained by vaccination, and much to be loſt by relinquiſhing inoculation.* He probably did not expect that death would be the conſequence of the inoculation of thoſe two children; but whatever be his puniſhment, it will never be equal to the turpitude of his conduct.

My friend Dr. Portenſchlag, who is the moſt active Vaccinator at Vienna, wiſhing to prove by his example that Vaccination can be undertaken in the earlieſt period of life, deſired me a week ago to vaccinate his new-born child four hours and a half

a half after its birth. The ceremony was performed in preſence of the prieſt and a great number of friends to the vaccination, and the child was chriſtened immediately after, by the name of Mary-Elizabeth-Vaccinia. If one ceremony could be made of the vaccination and chriſtening, would not the ſmall-pox be ſoon entirely eradicated? We have on records the caſe of a child vaccinated twenty-two hours after birth, Mary Elgs. Vaccinia Portenſchlag is ſurely the youngeſt which has hitherto been ſubmitted to this beneficial operation.

I have read juſt now the debates of the Houſe of Commons on the reward granted to Dr. Jenner. I confeſs that I do not think the remuneration adequate to the importance of the diſcovery, the liberality with which Dr. J. has communicated it to the world, and the uſual generoſity of the Engliſh Parliament; but I hope that the different ſocieties and corporations of Great Britain will, as they have ſo often done on ſuch occaſions, ſhew ſeparately their gratitude to the greateſt Medical Benefactor that the world can boaſt of.

I ſend to you a copy of my Second Edition, and an ivory lancet of my invention; though inſignificant, apparently, it ſeems to have powerfully promoted the propagation of the Vaccination, as all other metallic lancets contracted ruſt or verd de gris. The wooden ſheath which my turner has made by œconomy, in order to ſave the expence of quills, which he uſed formerly, ſeems to be an important improvement, becauſe ſome experiments have lately proved that the action of light decompoſes the Vaccine virus. At leaſt, the opacity of this ſheath is the only reaſon I can give for the much more frequent ſucceſs of the ivory lancets ſince a wooden one has been adopted.

If I can be of any ſervice to you, Gentlemen, for information on any part of the Continental Vaccination, I beg you will diſpoſe of me.

Vienna, June 20, 1802.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IN looking over an abstract from Dr. De Carro's "Observations on Inoculation for the Cow-pox," in the Appendix to the 37th vol. of the Monthly Review, and from some doubts expressed in your truly valuable journal, by Dr. Pearson, &c. respecting the possibility of receiving the Vaccine after Variolous infection, I am induced to send you the present statement as authentic, which, if you think worthy a page in your next Number, you will insert it, and oblige,

Sutton Ashford, Nottingham,
August 10, 1802.

Your's, &c.
R. JENKINSON.

In the beginning of June, 1800, I received two lancets from a medical friend, armed with Vaccine virus, with which, in the course of a week, I inoculated three children, (moistening the lancet, as I had been in the habit of doing for the variolous, with a little warm water). None of them taking effect, and not having made use of the Vaccine virus previous to this time, I felt considerably disappointed, and determined to try its effects another way; accordingly, with one of the same lancets, (without moistening) I inoculated a person who had had the variolous disease twelve or fourteen years before, in the natural way, which produced a well-formed pock, as I have ever since seen; and with the matter taken from which, on the 8th and 9th days, the former children were again inoculated, as well as several others, with the most complete success, having since stood the test of Inoculation for, and exposure to, Variolous infection, without producing any effect whatever.

On Styptic Applications; communicated to Dr. Bradley by MR EDWARD THORNHILL LUSCOMBE, *of the Second Dragoons.*

DURING the time I did duty at the General Military Hospital at Gosport, (to which place I went immediately after I ceased to be a pupil of your's, in August, 180 ,) I had a considerable number of men from Egypt and the West Indies in my charge, under the superintendance of Dr. Rogerson, and the Surgeons to the forces. Amongst my patients were many with wounds, principally gun-shot, in a very bad state indeed; most

moſt of their ſtumps were in a ſloughing or gangrenous ſtate, and hæmorrhagies from them took place almoſt hourly. In ſeveral caſes the preſſure which could be applied, together with the ſtyptics in common uſe, were inſufficient to reſtrain the flow of blood. In theſe men the hæmorrhage was effectually ſtopped by a ſolution of antimonium tartariſatum, in the proportion of four grains to an ounce of water, applied to the wounds by means of lint completely wetted in it. The parts were in ſuch a ſtate that the application of a ligature was impracticable.

The action of the antim. tart. I muſt leave to be explained by older and more able phyſiologiſts, not feeling myſelf at all equal to the taſk: But being convinced that it preſerved the life of more than one man, I beg leave to requeſt that you will give the naked fact a place in your univerſally read Journal, hoping that in other hands it will prove equally ſucceſsful.

To the Editors of the Medical and Phyſical Journal.

Gentlemen,

I Beg leave to offer a few Remarks on the Caſes publiſhed in the laſt Number of your Journal, by Mr. Pears, to whom I return thanks for the manner in which he ſpeaks of my attempts to promote Vaccine Inoculation; but I can ſcarcely coincide in opinion with him, that it was neceſſary to bring forward theſe caſes in the Medical Journal.

Such rumours as thoſe which Mr. Pears alludes to, when left to themſelves, gradually die away. Any notice of them in print, only ſerves to revive them.

The account publiſhed by Mr. Pears, would make any one ſuppoſe the puſtulous eruption in Mary Salt, much more formidable than it really was. Of this I need bring no better proof than that adduced by Mr. Pears himſelf, who ſays, Mr. Heaumes, the gentleman who attended her, informed him there was *no fluid*; and the mother of the child told him the puſtules contained a *watery fluid*. Mr. Heaumes alſo ſaid, the accompanying raſh reſembled the meaſles.

Mr. Pears is miſtaken in his opinion concerning the other child; it was not inoculated by me. This, however, is of but little moment, ſince it is well underſtood, that neither of them has had the ſmall-pox.

Mr.

Mr. Heaumes having ſeen Mary Salt, thought the eruption of the variolous kind. He acknowledged, however, in his converſation with me, the ſame evening, that in ſome places it appeared more like the meaſles.

The whole appeared to me of the herpetic kind, which was the opinion I expreſſed; but being informed that the ſmall-pox had been in the houſe; that three medical men had pronounced this to be that diſorder; that two other children who had been vaccinated in that neighbourhood, had ſickened for the ſmall-pox, and that a variolous eruption began to appear on one of them, I could not but entertain a doubt whether the patient had in reality had the perfect cow-pox. This doubt was ſtrengthened by the following circumſtance: Of three patients inoculated with matter taken from this child, infection took place only in one; and in that inſtance, the puſtule did not begin to appear till the fifteenth day.

Another of the children, who was ſuppoſed to be ſickening for the ſmall-pox, had been eating too much fruit, and had twenty-ſix ſtools within twenty-four hours. I gave my opinion, that nothing was to be feared reſpecting the ſmall-pox in this caſe. The diarrhœa was removed by the next morning; and when I called on this patient, I was informed by her mother, that Mary Salt had riſen at her uſual time, and complained of hunger; that her raſh was much abated; and that all alarm concerning her having the ſmall-pox was nearly at an end. This account I had the pleaſure to find, on calling at the houſe, was true. From that time, which was the *second*, and not the *fourth* day of the eruption, it is well known to the mother of the child, and to ſeveral of the neighbours, I gave my opinion that the caſe was not the ſmall-pox; I alſo communicated the ſame opinion to Dr. Jenner.

It is well known, that 'the ſmall-pox is a proteiform diſeaſe, aſſuming almoſt every colour and ſhape. Hence, it follows that there is no complaint with which the human body is afflicted,' that has given riſe to more miſtakes. Errors of this kind are continually occurring; and if you wiſh for caſes of this ſort, it would be no difficult matter to collect a ſufficient number to fill a Journal once a month.

Nevertheleſs, I am far from concluding, that any diſcuſſion of this kind will be of final diſadvantage to the new practice, ſince it will probably occaſion profeſſional men to be a little more cautious in giving a deciſion concerning eruptive diſorders, when their opinions are likely to be brought before the tribunal of the public.

I now ſhall add a few remarks on another article in the ſame number of your valuable Journal, by Mr. Badger.

To

To me it appears, that the eruptive disease alluded to by Mr. Badger, is the herpes pustulosus of Bell; an account of which may be seen in his Treatise on Ulcers. Eruptions of this kind, he observes, appear most frequently on the face, behind the ears, and on other parts of the head; and occur most commonly in children.

I have often seen a pustulous eruption affecting the scalp, but not always confined to the scalp, at different periods, from the earliest infancy to the age mentioned by your correspondent; but never had the least reason to suspect it to be infectious, unless by actual contact. When conveyed by the teeth of a comb, it is generally understood, that the matter of this disease may communicate infection from one person to another. I have also frequently seen the same complaint in those more advanced in years. One case, extremely violent in its nature, lately fell under my care, in a young woman, seventeen years of age, the daughter of Mr. Webb, at the Griffin, in Half Moon Street.

As to the treatment of the complaint, it is certainly improper to apply ointments while the pustules continue; and I am warranted by experience to say, that mercurials have no advantage over other catharics in this disease. The practice of Mr. Badger, as well as my own, authorizes me to conclude, that, as far as regards internal remedies, there is no specific in this complaint. If an inflammatory diathesis prevail, the antiphlogistic plan should be followed; if debility should appear, the tonic plan is indicated. If the hair be not removed, tinea capitis will ensue.

I have lately conveyed vaccine matter on a thread well impregnated, and enclosed in a tobacco-pipe, stopped with wax at each end, to many distant parts. Dr. Domeier, Physician to his Royal Highness the Duke of Sussex, at different times, received two parcels from me while at Lisbon, both of which proved successful. Some of the produce of this matter he sent to Madrid, where it also succeeded; and to the Brazils. I have likewise sent virus on a tooth-pick to several places, and received favourable reports. A puncture is first to be made with a lancet; then the tooth-pick to be inserted, and retained some time in the puncture.

I am, &c.

JOHN RING.

August 21, 1802.

Case

Case of a Pulmonary Polypus; by Dr. Eric Acharius.

AFTER having premiſed ſome general remarks on Polypous Concretions, their origin, difference, and ſeat, the author communicates the following caſe:

S. B. A poor girl, aged 15 years, had been attacked about ſix years before with violent vomiting, which increaſed to ſuch a degree, that ſhe had no reſt day or night, and as ſoon as ſhe ate or drank any thing, the vomiting came on, attended with a griping and a painful ſenſation at the heart, ceaſing frequently at the approach of another paroxyſm of vomiting, which often recurred even when ſhe had not taken any nouriſhment at all. With the vomiting ſhe ejected much mucus and bilious matter. Her ſtrength decreaſed conſiderably, and ſhe was obliged to keep her bed nearly ſix months, without experiencing much relief from the remedies ſhe was ordered to take. Afterwards, however, when ſhe had almoſt ceaſed uſing any medicine, ſhe got better by degrees; her appetite was reſtored, and the ſtomach could keep the ingeſta without farther complaint. A year and a half ſhe continued perfectly free from any complaint; after which time, however, ſhe was ſeized with a periodical head-ach, and ſome painful ſenſations in the ſtomach, without their being attended with vomiting; theſe complaints had ceaſed, when ſhe was attacked with an intermittent fever, which continued obſtinate againſt all remedies. Her ſtrength and fleſh waſted conſiderably, particularly as a very frequent and troubleſome cough ſupervened, which ſeemed to fruſtrate every medicine; but, in proportion as the cough increaſed, the paroxyſms decreaſed. Before the cough came on ſhe felt herſelf much oppreſſed, and her breath ſhort and difficult. Some time after ſhe brought up with the cough a polypus, without either blood or mucus, which almoſt inſtantly gave her great relief. Towards autumn the ague ceaſed, and a little after the cough; ſhe became quite well, and could leave her bed. Above ſix months after, the cough returned, and the patient brought up with it a great number of polypous concretions: the cough was dry, and attended with a tickling ſenſation in the throat, which always preceded the coughing up of the polypi: the cough returned from time to time. From this period, however, ſhe ſeemed to make a rapid progreſs towards health. She is of low ſtature, but luſty, and has by no means a ſickly appearance. It is expected, that ſhe will become much better with the appearance of the fluxus menſium. The colour of the polypi which this patient coughed up is white; their trunks are cylindrical, and ſometimes a little compreſſed, the extremities of which are broken

broken and ragged, or divided into many ramifications; they are the ſize of a common quill, ſome leſs, and others bigger. The ramifications ſeemed exactly to correſpond with the bronchial twigs, which they moſt probably fill up entirely; they are covered with a peculiar ſtrong but thin membrane; when cut through they appeared to be compoſed of fibres, placed thickly along each other, and their whole compoſition ſeemed to be ſolid; when cut tranſverſely, they had not the appearance of being compoſed of laminæ. They do not diſſolve in water, until it becomes putrid, at which time they are macerated into a white mucus. No ſimilar caſe is recorded by any author, except Dr. Warren, in Med. Tranſ. Vol. i. p. 401.

ACCOUNT OF DISEASES IN AN EASTERN DISTRICT OF LONDON,

From July 20, *to August* 20, 1802.

ACUTE DISEASES.	
Febris Intermittens Tertiana	2
Synocha	3
Rheumatiſmus Acutus	3
CHRONIC DISEASES.	
Tuſſis	6
Dyſpnœa	3
Tuſſis cum Dyſpnœa	7
Phthiſis Pulmonalis	4
Hydrothorax	3
Anaſarca	4
Cephalalgia	7
Paralyſis	3
Epilepſia	2
Syncope	3
Enterodynia	5
Hernia	1
Diarrhœa	3
Hæmorrhois	2
Dyſuria	3
Calculus	1
Hernia Humoralis	1
Impetigo	3
Rheumatiſmus Chronicus	9
PUERPERAL DISEASES.	
Ephemera	5
Maſtodynia	4
Abſceſſus Mammæ	2
Menorrhagia Lochialis	3
INFANTILE DISEASES.	
Angina Trachealis	1
Pertuſſis	3
Rubeola	4
Ophthalmia	5
Tabes Meſenterica	3

The alteration in the ſtate of the weather, and in the temperature of the air, has produced a favourable change in the ſtate of diſeaſes. The various morbid affections of the pulmonary ſyſtem, which have been ſo long protracted by the continuance of a cold and damp atmoſphere, have abated in their number and in their degrees of violence. There are ſtill, however, ſome diſeaſes of the cheſt remaining, which have ſucceeded the meaſles that have very generally prevailed amongſt children.

children. The caſe of Angina Trachealis, mentioned in the liſt, terminated fatally. The patient, a fine and healthy boy, after an apparently ſlight indiſpoſition of a few days continuance, complained of uneaſineſs about his throat, and was ſoon obſerved to breathe with conſiderable difficulty. This ſymptom was accompanied at firſt with a ſlight degree of fever, and a troubleſome cough. Theſe ſymptoms continued, and gradually increaſed in the degree of aggravation. Upon inſpecting the fauces, the tonſils appeared enlarged and inflamed; reſpiration became more difficult, and was attended with that peculiar ſound, which ſo ſtrongly characteriſes this diſeaſe. Leeches were immediately applied to the throat, and a bliſter was placed near to the part affected. Cathartics were repeatedly adminiſtered, and a determination to the ſkin was kept up by the uſe of antimonials. Conſiderable relief was obtained by this plan of treatment. The cough became leſs frequent, reſpiration was much relieved, the pulſe was much ſlower, and the countenance indicated that the general feelings of the patient were more comfortable. Upon an accumulation of viſcid mucus, which impeded reſpiration, relief was obtained by gradually increaſing the degree of nauſea till gentle vomiting was excited. But though relief was repeatedly obtained, and appearances were favourable for a ſhort time, yet, as is too commonly the caſe in this diſeaſe, theſe proved fallacious, and were ſoon ſucceeded by an aggravation of ſymptoms which terminated in death.

Having obtained permiſſion to inſpect the diſeaſed part, a conſiderable portion of the trachea was removed, which, upon being opened, diſcovered marks of inflammation throughout its ſurface. Upon the ſuperior part ſome purulent matter appeared, underneath which, and extending ſome way down the trachea, a thick membranous ſubſtance was diſcovered adhering very firmly, ſo as with difficulty to be removed by the probe.

Cases admitted under the Care of the Surgeon of the Finsbury Dispenſary, St. John's Square, Clerkenwell, from the 10th of June to the 10th of Auguſt, 1802.

[The former Report having been intended for a publication not excluſively of a Medical nature, the names of the diſeaſes were inſerted in Engliſh; thoſe terms being preferred, which, it was thought, would be moſt eaſily underſtood by the general reader: But the Report being transferred to the Medical and Phyſical Journal, it has been ſince thought more agreeable to the nature of that work, to give the liſt of diſeaſes a more ſcientific arrangement

ment and appearance, by rendering them according to their claſſical appel-lation.]

Phlegmone Artuum - -	4	Vulnera Capitis - - - -	1
———— Articulorum -	3	Contuſiones - - - -	13
———— Teſtis - - -	1	Combuſtura - - - - -	4
Ophthalmia - - - - - -	1	Lues - - - - - - - -	3
Eryſipelas - - - - -	2	Gonorrhœa virul. - - -	2
Abſceſſûs Artuum - - -	8	———— pura - - -	1
———— Maxillæ - - -	3	Scrophula - - - - -	5
———— Ani - - - -	2	Pſora - - - - - - -	2
———— Lateris - - -	1	Strictura Urethræ - - -	1
———— Labii pudendi -	1	Verrucæ - - - - - -	1
———— Pſoas - - - -	2	Tinea - - - - - - -	1
Mortificatio Artuum - -	2	Herpes - - - - - -	1
Ulcera Faciei - - - -	2	Varices - - - - - -	5
———— Artuum - - -	25	Exoſtoſis - - - - - -	1
Fiſtula Scroti - - - -	1	Spina incurvata - - - -	1
Contractio Articuli - -	1	Dyſecœa - - - - - -	1
Leucoma - - - - -	1	Hernia - - - - - - -	2
Fractura Ulnæ - - - -	1	Ganglion - - - - -	1
Vulnera Artuum - - -	4		

The very great and ſudden alteration which has taken place in the temperature of the atmoſphere, during the latter part of the time which the preſent Report embraces, has cauſed a conſiderable alteration in the aſpect of diſeaſes. The phyſicians of the metropolis have, doubtleſs, obſerved a viciſſitude in the nature of thoſe maladies which peculiarly fall under their cognizance: The diſeaſes of ſurgery have, in a proportionate degree, demonſtrated the influence which external cauſes exert over them.

Either extreme in the ſcale of the temperature of the atmoſphere muſt produce ſuch effects on a living body, as muſt, more or leſs, according to the exiſting ſtate of health and vigour, derange the natural, vital, or animal functions. This more eſpecially happens, when theſe extremes alternate ſuddenly with each other.

In every claſs of ſociety they muſt manifeſt their agency in ſome degree; but it is in the lower order of mankind that their effects are more particularly experienced, when the means cannot be enjoyed of guarding againſt the primary influence of theſe circumſtances, or of obviating the ſecondary cauſes which reſult therefrom, and which, in an increaſed ratio as the cauſes are multiplied, tend to induce diſeaſe, or, where diſeaſe does already exiſt, give birth to ſymptoms and appearances of an untoward nature, which otherwiſe might never have occurred.

There

There is no diseafe, which, in a more remarkable manner manifefts the alteration produced by a change of temperature, than the ulcers of weak, relaxed, and irritable habits. An ulcer in fuch a conftitution, of which there are very many among the poorer ranks of the community, upon the fudden acceffion of extremely warm weather, although before the change its appearance was kindly, very foon changes its afpect; the furface puts on a brown, unhealthy hue; ulceration extends at its edges, and oftentimes a fore of fcarcely half an inch in diameter will in a few days fpread round the limb. Neither are thefe changes of appearances to be wondered at, as no part partakes fo much of, and points out with more accuracy, the general health of the body, than an ulcerated furface. During the firft attack of a fever, we obferve the granulations of an ulcer become pale, and fhrink beneath the furface: as the fever advances, efpecially in fevers of debility, which are the moft common; indeed, I believe I may fay the only fever of the metropolis, the furface becomes in a foul and floughy ftate, which is in fact, mortification of the granulations: fo extreme heat, producing in relaxed and irritable habits indirect debility from the great exhauftion which is the natural confequence of it, is accompanied with an equally inactive ftate of the veffels of the ulcer, the procefs of fuch granulation is ftopped, and the parts which have already healed, very often fly out again, as it is termed. As very flight exciting caufes will produce an ulceration in newly formed fkin, or in fkin which has been produced to cover any previoufly ulcerated furface, as navy furgeons are accuftomed to fee the cicatrices of old ulcers fly out on an attack of fcurvy, or other difeafes of great debility. But independently of the effect which extreme heat muft have on the ulcer by means of the conftitution, it muft manifeft its local action likewife very injurioufly, for heat tends very much to expedite the procefs of putrefaction in animal fluids, and this effect it has in a very forcible manner in the fluids fecreted from an ulcer, as our fenfes moft powerfully evince to us, on approaching a large ulcer in the prefent ftate of the weather: this, by being confined, even for a few hours, muft excite on the furface of the ulcer an action of an unhealthy nature, and more efpecially when attended with a degree of uncleanlinefs, which in a larger proportion of the lower order of people, appears to be innate, and never to be forfaken.

I have obferved in a few cafes during the laft week of the prefent Report, that extenfive gangrene has fucceeded a very apparently trivial accident: in one cafe a fphacelus of fix inches in length, occurred merely in confequence of fcratching a pimple from the leg.

As

As we ſee the effects which extreme heat manifeſts in ulcers in ſome conſtitutions, it becomes our duty to endeavour to prevent theſe effects, where we ſuſpect ſuch a ſtate of conſtitution to exiſt: To prevent debility from exceſs of heat in ſuch caſes, I find moſt benefit reſults from the mineral acids, as they tend to invigorate the ſyſtem without adding any increaſe of ſtimulus. To guard againſt the ill effects of heat locally, the applications which I prefer are cold lotions; it ſignifies little what are the compoſition of theſe; the more ſimple perhaps the better. I have ſeen the greateſt poſſible advantage reſult (in caſes wherein the application could be attended to) from the conſtant repetition of cold water only to the ulcer, which ſhould be renewed as often as the ſenſe of cold diminiſhes: this requires, however, that a perſon's whole time ſhould be employed in the management of his diſeaſe, which can ſeldom happen, except in caſes in which their peculiar nature renders confinement indiſpenſable.

The advantage of cold applications in warm weather, I had an opportunity of obſerving lately in a caſe of extenſive gangrene, in which the uſual application of beer-ground poultices, or indeed of any poultice, gave the moſt excruciating pain, which yielded to the above treatment of cold lotions, often renewed, under which the ſlough ſeparated, and the ſore is now in a promiſing ſtate.

Among the diſeaſes of ſurgery which have rarely been cured comparatively to the frequency of their occurrence, may be reckoned the pſoas abſceſs. Practitioners have, however, in ſeveral inſtances, lately, performed a cure by the method pointed out by the judicious Mr. Abernethy, which conſiſts of evacuating the contents of the abſceſs by ſmall punctures, frequently repeated, whereby the ſides of the ſac gradually collapſe and adhere: where this operation is not performed, and the abſceſs burſts ſpontaneouſly, the patient ſeldom recovers; for, after a few days, ſymptoms of irritation come on, which preſently terminate in hectic and death.

That this event, however, does not always follow the ſpontaneous burſting of a pſoas abſceſs, is evident from a caſe which occurred lately at this charity: The patient had three years previouſly ſuffered an injury in his loins by carrying a heavy weight; an abſceſs formed, and was opened in the loins, which healed, and he was then enabled to purſue his uſual occupation, but ſtill was afflicted with a conſtant pain at the lower part of his back. Several months after a tumour formed in the groin, which continued to enlarge, till at length it burſt in two places, and diſcharged a conſiderable quantity of purulent matter, at which time he was admitted at the Diſpenſary as a patient. On

the firſt view of him, I did not expect that he would ſurvive long, as the diſcharge was prodigious, and ſymptoms of irritation, profuſe ſweating, great debility and loſs of appetite, had begun to take place: but, contrary to my expectations, by the free employment of ſuch a plan as was adapted to invigorate the powers of the conſtitution, and by ſuitable applications to the part itſelf, he gradually recovered from theſe ſymptoms; the diſcharge ceaſed from the cavity of the abſceſs, and he is now able to follow his cuſtomary employment, in better health than he has enjoyed for ſeveral years.

No. 68, Hatton Street. J. RICARDS.

List of Diſeaſes at the Bath City Diſpenſary, from June 1, *to July* 1, 1802.

Aſthma	3	Menorrhagia	1
Abſceſs	1	Phthiſical	6
Anaſarca	5	Pulmonary Complaints	3
Contuſion	1	Peripneumonia Notha	1
Cholera	4	Paralyſis	1
Colica	2	Pleurodyne	1
Chloroſis	2	Phyſconia	1
Diarrhœa	2	Pſora	3
Dyſpepſia	1	Rheumatiſmus	8
Eruptiones	4	Rubeola	2
Erythema	1	Synochus Bilioſa	14
Fever (Simple)	7	Syphilis	3
Febrile Complaints	4	Shingles	1
Gaſtrodynia	2	Spleen Enlarged	1
Gravelly Complaints	5	Strain	1
Hernia	3	Tuſſis	3
——— Humoralis	2	Typhus	3
Hemicrania	1	Urticaria	1
Hæmorrhagia	1	Ulcers	8
Hæmatemeſis	1	Vermes	1
Herpes	1		
Hydrocele	1	Total	119
Infantile Complaints	2		

Ditto from July 1 *to Auguſt* 1, 1802.

Angina	1	Cynanche Maligna	1
Aſthma	2	——— Parotidæa	1
Abſceſs	3	Cholera	2
Anaſarca	3	Colica	3
Bowel Complaints	5	——— Pictonum	1

Chloroſis

Chlorosis	4	Pulmonary Complaints	2
Contusion	1	Paraphymosis	1
Dysenteria	1	Pleurodyne	4
Diarrhœa	3	Psora	4
Dyspepsia	2	Rheumatismus	12
Erysipelas	1	Rubeola	7
Eruptiones	4	Synochus Biliosa	13
Febris Simplex	5	——— Pleuritica	1
——— interm. quotid.	2	——— Cholerica	1
Gastrodynia	6	——— Dysenterica	1
Hernia Humoralis	1	Syphilis	3
Herpes	2	Scrofula	3
Hysteria	1	Tussis	1
Inflammation	1	Tinea	1
Icthyosis	1	Ulcerated Legs	4
Lepra	2	Variola Conferta	1
Nephritic Complaints	4	——— Discreta	3
Neurosis	2		
Ophthalmia	1	Total	132
Phthisis Pulmonalis	4		

Bath City Dispensary, June 28, 1802.

The Committee, upon the representation of the Physicians of this Institution, being persuaded that the general extension of Vaccine Inoculation amongst the children of the poor, would effectually diminish the great mortality occasioned by Small-pox in this city, give notice, that all persons applying at the Dispensary may be inoculated without recommendation or expence. Attendance for this purpose will be given at the Dispensary every Saturday, by Mr. Creaser and Mr. White, at twelve o'clock; and the Committee cannot too strongly exhort the poorer classes of this city to avail themselves of this advantage, as the adoption of Vaccine Inoculation, when placed in their power, is a duty which they owe to themselves and others.

In consequence of the circulation of the above notice, 33 children have been inoculated since July 3.

Observations

Observations on the internal Use of Lead; communicated by Dr. Ryan, *of Kilkenny.*

IN consequence of the Controversy that has arisen on the nature of Apoplexy, between Dr. Langslow and Mr. Crowfoot, the attention of medical practitioners has been particularly directed to the pathology and cure of this disorder. Without any intention of entering the lists as a champion for either, I mean to confine myself to the history and treatment of an instance of this complaint, attended with very peculiar circumstances; and if you think it deserving a place in the Medical and Physical Journal, you will oblige me by inserting it.

Before I enter into a detail of this case, I must beg leave to mention that I took an opportunity, not long since, of transmitting you some Observations on the use of acetite of lead in hæmorrhagy of the lungs. In a note of the Editors, in reference to the concluding sentence of this paper, they affirm that this remedy has been freely made use of in London ever since Dr. Reynolds's Dissertation on that subject first made its appearance. Though the passage alluded to is very strongly worded, I nevertheless thought myself, in some measure, justified in making use of it, as from every recent publication that has come to my hands, I have not been able to discover a single case in which the acetite of lead has been administered with boldness or freedom; on the contrary, in all the periodical works, and in those of a different description that have noticed it, the idea of considerable danger from its deleterious powers in very limited quantities is strongly inculcated. One of the last Essays on its internal use that I have seen is by Mr. Clutterbuck. He gives the minutes of a convulsive disorder treated at the Universal Dispensary,* in which one fourth of a grain only of this metallic salt was taken four times a day; and yet he asserts, that this inconsiderable portion was attended with very unpleasant consequences. If other practitioners are to direct their practice by this example from the capital, very little encouragement is held out to them to imitate it, as it is not easy to comprehend how any complaint of magnitude or danger should readily yield to so inferior and reduced a dose of this medicine. Moreover, the venerable Dr. Heberden, in his estimable posthumous Work, enjoins physicians never to make use of it from the experience he has had of its bringing on colica pictonum.

* Vide Medical and Physical Journal, Vol. IV. page 287.

A lady of high rank in this town, ætat. 61, of a thin and rather meagre habit of body, ſuddenly fell ſpeechleſs to the ground the latter end of the ſummer, 1796. Medical aid was immediately procured, a bliſter was applied between the ſhoulders, one to each temple, and the bowels were emptied by a glyſter. I ſaw her in leſs than an hour after theſe means had been uſed, and found her labouring under a diſeaſe called by phyſicians epileptic apoplexy.*

She had juſt got out of a ſtrong convulſive fit, and lay completely apoplectic, ſnoring ſo loudly that ſhe could be diſtinctly heard from an adjoining apartment. Her pulſe was unuſually ſtrong, and ranged from 110 to 115 ſtrokes in a minute. On conſidering the nature of the caſe, I had no heſitation in recommending blood-letting as the only poſſible method by which her life could be preſerved. She was accordingly bled to the amount of about fourteen ounces, and two leeches were applied to each temple. I ſaw her in about an hour after, when ſhe ſhewed every ſymptom of returning ſenſibility, and in leſs than two hours more ſhe had completely thrown off the attack; but during the courſe of the night the diſorder returned in the ſame ſhape and form as at firſt, and ſhe was reſcued from it by a repetition of the bleeding. In both inſtances the blood threw up a large portion of coagulating lymph, and had every appearance of being highly inflammatory. From this period ſhe enjoyed very tolerable health for the ſpace of ſix months, when ſhe was ſuddenly ſeized with threatening ſymptoms of a freſh attack, her ſpeech ſuddenly failing her ſo as to render her incapable of articulating more than one or two words of one ſyllable, though ſhe was perfectly conſcious of her ſituation, and ſtretched out her arm for the purpoſe of having herſelf blooded, as ſhe underſtood her life was preſerved by it in her former illneſs. Her countenance and manner were highly expreſſive of the agitation of her mind, and clearly evinced how much ſhe muſt have been alive to the critical and impending danger ſhe was in. The pulſe was equally full, quick, and vibratory as in the firſt paroxyſm of her diſorder. The moment aſſiſtance could be had, ſhe was copiouſly blooded, and it was highly intereſting to obſerve how calm and tranquil ſhe became during the flow of the blood; in fact, it acted more like a charm than like the uſual efficacy of remedial agents, completely

* It is probable ſome objection may be made to this caſe as not being one in point; but as, in all its ſymptoms, the complaint reſembled the apoplexy more ſtrongly than epilepſy, it is to be hoped its hiſtory will not be conſidered irrelevant to the ſubject in queſtion.

restoring the power of ſpeech in a few minutes, and in a very ſhort time thereafter her accuſtomed ſpirits and vivacity.

For twelve months more no extraordinary deviation from health was obſerved to occur; once or twice, indeed, ſome ſymptoms of beginning congeſtion of blood in the head began to ſhow themſelves, which were readily done away by a bliſter to the neck, or by ſome briſk cathartic medicine. However, ſhe at length began to experience a ſenſe of weight in the head, fluſhings in the face, palpitation of the heart, and ſpaſmodic twitches in different parts of the body; theſe were conſidered by herſelf, as well as by her friends, no uncertain premonitory ſign of an approaching paroxyſm, and I was ſent for to viſit her. While I ſat by her, enquiring into the ſtate of her health, her ſpeech ſuddenly failed, and ſhe ſeemed to be in the utmoſt horror and agony of mind imaginable. To avert, if poſſible, the ſtorm that every inſtant was expected to burſt, the apothecary who uſually attended was deſired to hurry as faſt as poſſible; but before he had time enough to arrive and tye up the arm, ſhe dropped from her chair convulſed and inſenſible; blood to the amount of near 14 ounces was taken from the arm by a large orifice, and the bowels were emptied by a glyſter; but no advantage having been obtained by this quantity, and the pulſe remaining as full and energetic as before the bleeding, it was determined upon to have recourſe to it a ſecond time, in nearly the ſame proportion, after having waited for the ſpace of an hour to ſee the reſult of the firſt. This, however, appearing as ineffectual as the former, it was thought expedient to fly to the aid of bliſters; accordingly, they were applied to the whole ſcalp of the head, between the ſhoulders, to the legs, and ſinapiſms were laid on the ſoles of the feet. She remained under the influence of theſe, without feeling or motion, upwards of four hours; and inſtead of any amendment having taken place, the proſpect every inſtant became ſo gloomy and alarming, that death it was thought muſt ineviatbly have cloſed the ſcene in a ſhort time, unleſs ſomething further was attempted in a prompt and deciſive manner. Though the loſs of blood already ſuſtained was conſiderable, the pulſe ſtill retained its hardneſs and frequency; the face was fluſhed and bloated; and from the rapidity with which the blood was driven to the head, the pulſation of the temporal and carotid arteries was diſtinctly perceptible, the moment the eye was directed to the countenance.

Under theſe circumſtances, as a laſt effort, the temporal artery was opened. The blood was allowed to flow till the force of the circulation was effectually ſubdued. This was not accompliſhed until between twelve and fourteen ounces were drawn.

drawn. After this ſhe began to emerge from her depreſſed and almoſt lifeleſs ſituation, gradually recovering her mental and bodily powers; and in leſs than ſix hours from the laſt bleeding, ſhe had not the ſmalleſt remnant of her diſorder except what was occaſioned by the exceſſive loſs of blood and the irritation of the bliſter.

From this time to her death, which took place the latter end of December laſt, ſhe experienced but one formidable return of her complaint that menaced the exiſtence of life; it was in conſequence of a ſhock ſhe received from unexpectedly ſeeing a favourite daughter who had been long abſent, and who was the object of her love and adoration. After her arrival was announced, ſhe endeavoured to ſummon up all the reſolution ſhe poſſeſſed, in order to reſiſt, if poſſible, the forcible impreſſion ſhe well knew the ſight of her beloved child would make; but all to no purpoſe, as immediately after the interview had taken place, ſhe fell down ſpeechleſs and apoplectic, and in this hopeleſs ſtate remained for eight or ten hours, till ſhe was ſnatched from it by exactly the ſame vigorous and deciſive meaſures that were adopted in the firſt attack.

The intellectual faculties more tardily developed themſelves after this than after any former illneſs, an imbecility of mind remaining for many days after all apprehenſions about life had vaniſhed; but her conſtitution, ſhattered by the frequent attacks it endured, could not long hold out; and after languiſhing about two months, ſhe was carried off by an inflammation of her lungs, at the age of ſixty-ſeven or ſixty-eight years.

Her ſtate of health during the length of time that intervened between the ſecond and laſt attack (a ſpace of between four and five years) was fluctuating and chequered. In the winter ſeaſon, and particularly when the weather was cold, the diſorder ſhewed very little diſpoſition to recur; but in the warmer months of ſummer it was found neceſſary to have a watchful eye upon her, leſt a paroxyſm ſhould come on from the turgid ſtate of the veſſels of the brain, evidently induced by the power of heat on the arterial ſyſtem. On theſe occaſions, taking blood by opening the temporal artery, or by the application of leeches, was certain of affording inſtantaneous relief.

In this lady's caſe, a ſtriking peculiarity demands particular notice. In complete abſence of diſeaſe, and full enjoyment of health, the general ſtandard of the pulſe was about 100, and ſeldom leſs than 95 ſtrokes in a minute, though occaſionally liable to variations from accidental cauſes. The beat of the artery too was unnaturally hard, ſo as to authoriſe one to pronounce it a highly morbid ſtate of action, though all the other func-

tions of the body were apparently in perfect harmony and order.

The plan of cure, or rather of prevention, was conducted on the principle of avoiding every thing that could produce excitement in the ſyſtem, while it was equally an object in view to guard againſt too great a reduction of the energy and powers of the conſtitution. Animal food was allowed in moderate quantity, and white meats were chiefly recommended and made uſe of; but wine, in every ſhape and form, was prohibited; the conſtant beverage was lemonade, or cyder diluted with a large proportion of water. An iſſue was cut in the neck, and one inſerted above the knee, at each ſide, in the uſual place; the head was regularly ſhaved twice a week, and cold water poured on it every morning.

At one time a diet conſiſting of vegetable and farinaceous matter was entered upon, and perſevered in with rigour for upwards of two months, without any viſible effect in diminiſhing the plethoric ſtate of the veſſels of the brain; on the contrary, ſome very ſerious appearances of plenitude began to be manifeſt, and which it was found neceſſary to obviate by topical blood-letting. Far different was the effect of deducting from the ordinary quantity of liquids taken in; a reduction of one-third, and ſometimes one-half, of the uſual daily allowance of drink, was enjoined, and frequently attended to with ſtrictneſs and punctuality. The efficacy of this was prominent and ſtriking above every other remedy employed; the pulſe loſt of its force, of its hardneſs, of its frequency and fullneſs. So ſudden and manifeſt was the tranſition from morbid to healthy action, after the adoption of this plan, that the exemption from diſeaſe that took place, and the prolongation of life, may be in a great meaſure attributed to its influence.

Observations on Delivery in difficult Cases of the Presentation of the Shoulder of the Fœtus; and where one or both Arms present along with the Head; communicated by Mr. James Barlow, *of Blackburn, Lancashire.*

WITHOUT attempting to explain the cauſe of preternatural preſentations of the Fœtus, I will content myſelf with briefly offering a few remarks on this branch of obſtetric knowledge, through the medium of your much eſteemed and valuable Journal.

On taking a curfory view of the hiftory of Midwifery, it is evident that it was the practice of the antients in every fpecies of prefentation, excepting the head, to reverfe the part prefenting, and fubftitute the head in its place, and various uncouth expedients were had recourfe to, to effectuate this fubverfion of the fœtus.

We find Hippocrates, who lived 460 years before the Chriftian era, and from which period the moft authentic improvements in the obftetric art may be dated, recommending for this purpofe, among other abfurd cuftoms, to fhake and roll the woman on the bed; and if this method fail, he further advifes to difmember the fœtus, and extract it with inftruments; for he allows no delivery to be natural, except that of the head firft prefenting: And this opinion was fo generally received, that Pliny eftablifhed it in his time as a maxim, that the order of Nature is to enter into the world by the head; and the cuftom to go out of it by the feet. Ariftotle and Galen were of the fame opinion, and regarded the delivery by the feet as foreign to Nature. Amongft others who embraced the fame notion are Mercurialis, Galeatius, James Rueft, Eucharius * Rhodion, Mercatus, Varundus, and Perdulcis. Though the opinion of thefe authors was generally adopted, yet the method of turning and delivering by the feet was difputed for the fpace of fixteen centuries; and this doctrine, with fome other vague improvements in the art, was the practice chiefly perpetuated till the time of Ambrofe Parey, who, about the year 1575, publifhed his work on the Generation of Man, wherein he deviates from moft of his predeceffors, and rejects the prepofterous cuftoms eftablifhed in thofe times, and expressly points out the great improvement in the obftetric art, of turning the fœtus, and delivering by the feet in all preternatural prefentations †.

About this period this important art began to emerge from obfcurity; and, amongft the advocates for the fame mode of de-

* The practice adopted by this author, who publifhed a work intitled, The Garden of Rofes, for pregnant ladies and midwifes, in the year 1551, was generally followed during that century, without any effential improvement.

† Parey may juftly be ranked amongft the firft who alfo introduced the practice of turning in cafes of uterine hæmorrhage; though this work is filent on that head, yet his pupil, Guillemeau, acknowledges this when attending Mad. Simon, daughter to Ambrofe Parey. Louifa Burgeois, who publifhed a Treatife on Midwifery about the year 1609, mentions this mode of delivery in cafes of flooding during pregnancy. See Chapter 4th and 5th.

The celebrated Puzos has alfo illuftrated this fubject with much ingenuity. See the Memoirs of the Royal Academy of Surgery at Paris.

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livery, promulgated by Parey, for example, are Celſus, Ætius, Moſchion, Paul d'Egina, Serapion, Avicenna, Philomenes, Marinello, and Albucaſis. Guillemeau, who was pupil to Ambroſe Parey, after much experience, adopted the method of turning and delivering by the feet; but the practice met with much oppoſition at different periods, and never became general till the time of Mauriceau; ſince which epoch, the art of midwifery has been gradually advancing towards perfection; and the lateſt authors have furniſhed us with precepts ſtill better calculated to ſurmount impending difficulties. What chiefly renders the preſentation of the ſhoulder the more perplexing, is, when the liquor amnii has been long evacuated, and that extremity wedged in the brim of the pelvis by the repeated and violent action of the uterus upon the body of the child. In this ſituation, the accoucheur ſhould make himſelf early acquainted with the ſtate of the os uteri, and if the orifice of that viſcus be ſo far dilated as to admit the operator's hand, and the pains not ſtrong, the ſituation of the fœtus ſhould then be aſcertained with as much accuracy as poſſible; and if the uterus preſents no inordinate obſtacle, delivery may then be accompliſhed, by gently inſinuating the hand along the breaſt of the child and bringing down the feet, thus finiſhing the delivery according to the rules laid down by authors. If, however, on the diſcharge of the waters, the pains ſhould continue without remiſſion, delivery will be more hazardous, and the difficulty attendant on turning the fœtus will be in proportion to the violent and irregular contractions of the uterus; and during the preſence of the pains, the accoucheur ſhould be cautious of exerting much force in attempts to introduce the hand or raiſe the ſhoulder, leſt a rupture of that organ be the conſequence. In this ſtate, a quantity of blood taken from the arm of the mother, and a clyſter injected up the rectum, containing about 100 or 120 drops of tinct. opii, will generally moderate the violence of the uterine action ſufficient to allow the introduction of the hand for the purpoſe of extracting the child; yet, notwithſtanding our utmoſt efforts, when delivery has been protracted beyond due time, and the waters long evacuated, the child generally falls a victim eventually, even though the pelvis be well formed, and every means uſed which the art can ſuggeſt. In ſome caſes, though the ſhoulder of the fœtus originally preſented alone, yet when the orificium uteri is become conſiderably dilated, the arm will, by the efforts of the uterus, be forced down into the vagina, and the hand be protruded at the os externum. In this ſtate it has been recommended by ſome authors, to amputate or twiſt off the arm of the fœtus at the ſhoulder, in order to facilitate the introduction of the hand of the accoucheur; but

but this trifling impediment ſeldom or ever calls for ſuch inhuman interference, and the records of obſtetric practice furniſhes us with but too many inſtances of ſuch wanton barbarity or ignorance.

Chapman relates a caſe of this kind, where the fœtus was ſuppoſed by the accoucheur to be dead, and who, after having one arm amputated whilſt in the vagina uteri, afterwards lived to be a man. More examples might be adduced from authors, of children being unneceſſarily diſmembered, and a few of this deſcription have fallen under my own cognizance, but it is unneceſſary to recount ſuch leſſons of cruelty, as they can ſerve no good purpoſe to direct our future practice.

It ſometimes happens, when the ſhoulder of the fœtus has become wedged in the ſuperior aperture of the pelvis by the continued force of the uterus, in ſuch a manner that the hand of the operator cannot paſs by the preſenting ſhoulder; to encounter this obſtacle, it has been recommended to force or raiſe the child by inſtruments. Dr. Burton made uſe of what he calls a crutch for this purpoſe; and the impellens of Albucaſis is intended to produce the ſame effect, by raiſing the preſenting part of the child; but when the pains have abated, this may be ſurmounted with greater facility and ſafety by means of the operator's hand properly applied in the arm-pit of the child, and raiſing the ſhoulder towards the fundus uteri, and thus perſevering gradually in this manner, the hand will gain admiſſion to the feet, and delivery be effected without the uſe of inſtruments. It rarely happens, after every means has been uſed, that the ſhoulder becomes impelled by the force of the uterus ſo far in the pelvis, that it is utterly impoſſible to introduce the hand or raiſe the ſhoulder above the brim of the pelvis; and when this has been the caſe, the powers of the uterus have in ſome inſtances accompliſhed the delivery by a ſpontaneous evolution of the fœtus: A caſe of this deſcription occurred to me about ten years ago, the particulars of which I will briefly relate. The woman was at the full period of her firſt uterine geſtation; I was called to her on the Friday evening, after a midwife had been with her all that day, and part of the preceding night; on examination, I found the arm preſenting, and the hand of the fœtus protruded conſiderably out at the os externum, and very much ſwoln; the waters were evacuated early on the day before, the pains were ſtrong, and the orificium uteri was conſiderably dilated. I made an attempt to introduce my hand, but the uterine efforts were ſo forcible, that I could obtain no advantage: About twelve o'clock the ſame evening, I gave her forty drops of * tinct. opii, but without perceiving any

* Would not the Digitalis, either given alone, or combined with opium, be of ſervice in abating the immoderate action of the uterus?

abatement of the pains; the ſame quantity was adminiſtered in about two hours from taking the firſt doſe, but without producing the deſired effect. I again made another attempt to introduce my hand, but with no better ſucceſs than before, for the pains returned with redoubled force and frequency, and the action of the uterus was now ſuch, as to forbid any further attempts to turn the fœtus; the ſhoulder of the child now became forcibly preſſed upon the perineum; ſhe continued in this extreme miſery till the following evening, when the force of the uterus was ſo great, that I expected a rupture of that organ would every moment take place. Being once more induced to aſcertain the nature of the caſe, I was agreeably ſurpriſed to find the preſenting arm of the fœtus retracting, and the breech ſoon ſupplied the place of the ſhoulder, and was expelled in a few minutes by the powers of the uterus, after which the ſhoulder and head were extracted, and the placenta immediately followed the exit of the child, which was dead. Notwithſtanding the woman's ſevere ſufferings, ſhe had a ſpeedy recovery.

Though the ſpontaneous evolution of the fœtus will, under certain circumſtances which are concealed* from us, occaſionally take place, and granting to the inherent efforts of the uterus its full force, there is reaſon to believe, that were every caſe of the preſentation of the ſhoulder left entirely to the power of Nature, many lives would be thereby ſacrificed, which by a timely and well regulated interference, might be preſerved: it is I preſume only a very rare occurrence when the evolution terminates the delivery, and that almoſt always with deſtruction to the fœtus; and is it not a little ſurpriſing, that the diſcovery of ſuch a phenomenon ſhould have eſcaped the notice of all authors before the time of Dr. Denman, more particularly during that period when the art of turning and delivering by the feet was unpractiſed? There are few caſes of the preſentation of the ſhoulder, and when the pelvis is well formed, where delivery may not be accompliſhed with perfect ſafety by turning either immediately after the evacuation of the waters, or by delaying the attempt till the action of the uterus has abated, after having moderated its efforts by adminiſtering the abovementioned

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* In the 38th chapter of the book of Geneſis, there is a curious account of (Tamar) bringing forth living twins; the firſt which preſented with the arm ſo far protruded that a ſcarlet thread was tied upon the hand, was the latter of the two fœtuſes which came forth. How this reverſion could be I will not offer to explain; but it appears that the midwife was a little ſurpriſed at the occurrence, for ſhe exclaimed, "How haſt thou broken forth! this breach be upon thee!" Which expreſſion gives reaſon to conclude, that ſuch an event was uncommon in her practice; and alſo that ſhe was not in the habit of turning and delivering by the feet.

mentioned medicines. It has been the practice with some accoucheurs, in cases of great difficulty, to sever the head from the body of the fœtus with the blunt hook, or an instrument resembling the crotchet, with a sharp ridge on the concave part of the bend, and similar to the one described by Celsus. This author, however, differs in one respect from the mode of delivery adopted by others in the use of this instrument; for he directs to bring away the head first, and after that the rest of the body. How far either of these methods of operating with hooks, and beheading the fœtus whilst in the uterus, may be warrantable, I cannot absolutely pretend to determine, having never put them in practice, but am inclined to believe, that where an instrument such as the crotchet can be used with safety to the mother as high in the pelvis or uterus as to effect a separation of the head from the body of the fœtus, the hand of the accoucheur might with equal facility and safety be conducted into that organ, and the fœtus turned by bringing down the feet; or, if this simple expedient fail, it may then be requisite to fix a noose on one or both feet, and pull thereat in a reciprocal or wriggling direction with one hand, whilst the other is employed in raising the shoulder or body of the child towards the fundus uteri. By acting in this manner, and with due perseverance, the situation of the fœtus will be reversed; and if the pelvis be well formed, delivery may be thus accomplished without having recourse to any instrument for the purpose of dismembering the fœtus. If, on the other hand, the apertures of the pelvis are so much contracted that the head of a mature fœtus cannot enter; or, in other words, when it appears manifest to the accoucheur that the superior strait of the pelvis does not exceed three inches in diameter, then every attempt to turn the fœtus as above directed would be useless; and no other mode of effecting delivery, under these circumstances, appears more eligible than by the use of the instruments generally employed in embryulcia †.

I come now to treat on that species of preternatural presentation where one or both arms present, and the head either resting on some part above the brim, or advanced along with either of the superior extremities into the pelvis. The mode of delivery sanctioned by authors in this division of presentation, appears involved in some degree of ambiguity; for little variation of practice has been adopted, whether the presentation

† Vide Select Cases in Midwifery, by Dr. James Hamilton; also Medical and Physical Journal, No. XL. and Heister's Surgery.

tion of the hand or hands at the brim of the pelvis, or that of one or both arms descended low in the vagina, the same plan of delivery in every state, however dissimilar the case may be, seems to be invariably pursued. I conceive there requires much discrimination as well as variety of practice necessary to be adopted, according to different situation and stages in which the fœtus is found to present under this distinction of preternatural presentations.

If the accoucheur has the management of a case of this kind from the time of the discharge of the liquor amnii, and the hand of the fœtus is ascertained to present, and the head can be brought into the axis of the pelvis, it should be effected as early as the state of the os uteri will admit, and the reduction of the hand in this state of the case may be frequently accomplished by pushing it up and supporting it at the brim of the pelvis till the head becomes engaged in the superior aperture: if the other hand should protrude, it may be encountered by a similar expedient. If these attempts prove ineffectual, I would recommend the accoucheur to introduce a piece of sponge or other soft substance along the cavity of the pelvis during the absence of a pain, and wedge or restrain the presenting hand or hands above the superior strait, till the head has cleared the brim of the pelvis. It may be alleged, that the introduction of such substance into the cavity of the pelvis, may obstruct the exit of the child; but this, on reflection, cannot be admitted as an objection, for the substance introduced will either be pushed forwards along with the head, or otherwise be lodged above the brim of the pelvis, and in either case will prove no obstacle to delivery. It will be evident that I here allude only to those cases where one or both hands present, and not where the fore arm is advanced to the os externum, and the head engaged in the cavity of the pelvis. I have in a few cases succeeded by replacing the hand as above directed; and in one instance of the descent of the funis umbilicalis along with the head, preserved the life of the fœtus by pushing up the descended funis out of the way of compression, and introduced a quantity of cotton wool in such a manner as to plug up the passage on that side of the head where the funis protruded. The same mode of proceeding may be adopted with advantage when the breech presents together with the funis, if the pulsation be perceptible in the cord.

When the head of the fœtus has descended so far in the pelvis as to become wedged in that tube, and either the funis or one or both arms of the fœtus protrude therewith, then every attempt to turn the child should be abandoned, and the event of the case be left to the efforts of Nature; and if these fail to accomplish the exit of the child, then the use of the lever becomes

comes admissible, and delivery will, even under these circumstances, be sometimes crowned with success; for, by pursuing an adverse plan of delivery, the child in all probability would be sacrificed, and the mother's life endangered; it is then much safer to leave the event to Nature; and if the efforts of the uterus be insufficient to effect delivery, even when assisted by the lever, recourse may then be had to the crotchet. When one arm only presents, and the head advances in a proper direction, there appears less risk both to the mother and fœtus by not either attempting to reduce the hand or reversing the fœtus; for one arm presenting with the head in a well formed pelvis, will seldom oppose any material obstacle to delivery more than what may be easily obviated by the use of the lever; but when both superior extremities present, and the head is advanced in the pelvis, the case wears a more unfavourable aspect; and this in proportion to the capacity of the pelvis, and rigidity of the soft parts; and yet, when the reduction of the parts presenting with the head cannot be effected without exerting much force, and the head is become engaged, and the pains strong, Nature will frequently be able to complete her own work with safety to both mother and child without manual assistance. As a proof of what I am advancing, I have attended two cases of this description, when both arms presented with the head of the fœtus, and the delivery was terminated without harm either to mother or child, in both instances, by the efforts of Nature alone. Another case of the same kind I was witness to, where the accoucheur, with great difficulty, finished the delivery by turning: the child was dead, and the mother had a very narrow escape in consequence. The difficulty and danger of reducing the hand or arm of the fœtus will be in proportion to the action of the uterus; and the great obstacle which generally opposes the introduction of the hand, is the contraction of the cervix uteri, and not the protruded part of the fœtus, as is too generally supposed; notwithstanding, the reduction of the superior extremities, when advanced with the head into the cavity of the pelvis, is frequently impracticable, and may sometimes prove dangerous both to the mother and fœtus when much force is used with this view; or, what is still more hazardous, by turning and delivering by the feet; nor does the practice of turning in this species of presentation become essentially necessary; neither does the reduction of the hand (when the pelvis is well formed) except it can be accomplished before the head be engaged in the superior aperture. If the accoucheur be called early, and before the membranes are ruptured, he will sometimes be able to distinguish the fingers of the fœtus before their rupture takes place. In this situation, if the uterus be sufficiently

ciently dilated, it may be prudent to introduce the hand and rupture the membranes, rather than leave this evacuation to a ſpontaneous event: this being done, the arm of the fœtus will generally, if not prevented, be forced down by the efforts of the uterus; the accoucheur ſhould then immediately endeavour to obviate, if poſſible, by engaging the head and retaining the hand of the fœtus above the brim of the pelvis: if this cannot be accompliſhed, and either the funis or arm of the fœtus protrude, the operator's hand ſhould then be conducted to the feet of the child, and delivery terminated by turning.

Notwithſtanding all theſe efforts, the limits of our art are too often ſuch as do not altogether furniſh us with reſources in this ſpecies of birth, ſufficient to ſurmount every obſtacle adequate for the preſervation of the fœtus; nevertheleſs, if theſe ſcattered fragments ſhould be the means of ſaving a ſingle life, I ſhall not conſider the little time beſtowed on the ſubject ill employed.

Auguſt 2, 1802.

An Address lately delivered to the Medical Society of Horncastle, on Endemic Causes of Disease; by C. HARRISON, M. D. *by whom it has been communicated to the Editors.*

GENTLEMEN,

I Riſe to thank you for ſelecting me for your Preſident.—To be choſen the firſt among equals, by the unanimous ſuffrages of independent Aſſociates, is, in my eſtimation, the higheſt honour that can be conferred upon any individual. Impreſſed with this ſentiment, I beg leave to acknowledge your partiality towards me in terms of the warmeſt gratitude, and to aſſure you that, on my part, no exertion ſhall be wanting to promote the many advantages which may be derived from our Society: theſe I will take ſome future opportunity to enumerate and explain; but at this time I muſt neceſſarily paſs over ſeveral of them without notice.

The county of Lincoln is, as you know, of great extent, and contains a variety of ſoils which appear to have no ſmall influence upon the health and the lives of its inhabitants. To diſtinguiſh theſe from each other, by chemical analyſis, and aſcertain the diſeaſes which depend upon them and other local cauſes, are objects of great national importance, and may be accompliſhed, in a great meaſure, by the combined efforts of all

all our fellow members. To complete an undertaking of this extenſive and multifarious nature, requires the zealous co-operation of numerous individuals; and I make no doubt, as this county happily contains many patriotic and ingenious characters, if we deſire aſſiſtance, materials for this purpoſe will be induſtriouſly collected, and liberally communicated.

The town of Horncaſtle is in a central part of the county, and upon the edge of the Wolds. On both accounts it is well ſituated for the inquiry; and as the Society conſiſts of Members, who practiſe in various places, it will be leſs difficult to obtain the neceſſary information.

Dr. Mitchell, of New York, and other eminent Chemiſts and Philoſophers, entertain an opinion, that countries abounding with calcareous matters are ſeldom viſited by epidemic complaints. The extenſive range of elevated grounds, which conſtitute a great part of Lindſey, are called the Wolds of Lincolnſhire. Theſe, and the Cliff Row, which is ſituated chiefly in Keſteven, are entirely calcareous. The diviſion of Holland, with the marſhes, fens, and other low lands, are likewiſe of great extent. They conſiſt chiefly of ſandy, loamy moor and clay lands, which are, more or leſs, completely drained, and are in different degrees of cultivation. Theſe tracts either contain no calcareous ingredients, or the ſtrata are buried ſo deep in the bowels of the earth as not to affect the ſurface of the ground, or the incumbent atmoſphere. Since the county of Lincoln includes ſuch a variety of ſoils, I conceive, that by making diligent and minute inquiries every where among the aged and intelligent inhabitants; by collecting and comparing the parochial regiſters in all the market-towns and villages for the laſt fifty years; and by ſoliciting information from medical practitioners and literary men, we may obtain ſuch a knowledge of the epidemic and prevalent diſeaſes of the county as will enable us, in our reſpective ſtations, to be of greater ſervice to our patients, to our relations, and the community at large.

I have reſided at Horncaſtle upwards of fourteen years; and although I have been actively engaged, during that time, in the exerciſe of medicine, I do not recollect any diſorders except the influenza, ſmall-pox, meaſles, and hooping-cough, to have been epidemic in this place before laſt year, when a typhus fever was brought into it by ſome ſtrangers.

This fever has, I believe, been very general in other parts of the county, as well as at Horncaſtle; but whether it has prevailed more in calcareous or other diſtricts, are circumſtances upon which I can give you no information.

According to Dr. Mitchell and his followers, azote, or, as they

they term it, fepton, is the caufe of moft epidemic, and of many fporadic diforders. It exifts naturally in the atmofphere, under the appellation of azotic gas. All putrefying animals, and many corrupting vegetables, fupply it copioufly; but fo great is its affinity to caloric, oxygen, and many other things, that it has never been obtained feparate and ifolated. He fuppofes fepton to favour the growth of vegetables, and to be of great fervice in agriculture. In a concentrated ftate, he thinks it deftroys vegetation by too powerful a ftimulus, and produces many very formidable and virulent diftempers. Septon, united to caloric and oxygen, forms a great variety of compounds, which are greedily attracted by calcareous fubftances, &c. Neutralized by this means, it exerts no deleterious effects upon the human conftitution. In calcareous countries, the excefs of fepton in the air is prevented by its attaching itfelf to the quicklime of the foil, as faft as it is extricated. In other places, it is wafted about in the atmofphere, and forms various compounds, by which its virulence is reftrained or modified.

According to this opinion, it follows, that calcareous regions are lefs expofed to epidemic maladies, and to feveral difeafes, which afflict the inhabitants of other places. I have reafon to believe, that the prevalent complaints upon the wolds and in the fens differ confiderably from each other. The confumptions upon the wolds, I have been accuftomed to impute to an oxygenated atmofphere, and the calculous affections to the prefence of calcareous impregnations in the wells and rivers. In the fens, idiophatic confumptions and ftone are feldom obferved; but in fpring and autumn, the inhabitants are expofed to obftinate agues and remitting diforders. Of late years the fens have been much more healthy; and when, by the works that are now conftructing, a complete drainage fhall be obtained, I think that they will become not only among the moft valuable agricultural tracts in the ifland, but among the moft falubrious to the inhabitants. By the deftruction of organic bodies, and in many other ways, this principle is extricated in all countries. In burying grounds and in flaughter houfes, &c. it is abundantly produced, and has been fuppofed by many phyficians to render the air unwholfome to the inhabitants. Before the time of Dr. M. feveral deftructive and wide fpreading epidemics had been traced to putrefying fubftances; and it becomes a matter of ferious inquiry, how far the cuftom of interring dead bodies in churches and in towns ought to be permitted, or ought to be interdicted, by the authority of government.

For my own part, I can fee no advantage that will accrue to individuals from perfifting in the practice, and therefore I fhall be happy to fee it difcontinued.

During

During the destruction of animal matters, volatile substances certainly ascend from the ground and mix with the atmosphere. The more fixed principles are dissolved in the rain water that descends into burying grounds, and, passing with it through the bowels of the earth, are received into wells, from which the inhabitants of towns are supplied with water for culinary purposes. Should it turn out that the air and the water of such places are not pestilential, I do not suppose that the gallantry of Britons is so truly romantic, as to receive any gratification from inhaling or drinking the exuviæ of their deceased lovers or ancestors. By burying a long time in church-yards, the soil becomes raised above the floor of the church; this makes the ground damp, and the moisture, with its various impregnations, ascends into the upper parts, and contaminates the whole air of the church. Many diseases are occasioned by moisture acting upon the human constitution; and as its influence is greatly favoured by rest, invalids are exposed to danger by remaining long in such situations.

Without imputing too much to the effects of aqueous and atmospherical impregnations, I should recommend that burials in towns, where practicable, be discontinued, and the floors of all churches raised above the surface of the adjacent grounds. Till this be done, and free ventilation encouraged, the devout inhabitants will be in danger of suffering from the damp and stagnant air in which they are enveloped, during the period of this necessary and important part of their duty.

Evils of this kind may be easily removed, or I should have had great reluctance in disturbing your minds, although in a matter of such importance to your health and comfort.

But the diseases to which I am at present desirous to call your particular attention, are, pulmonary consumptions; calculous affections; and intermittent disorders. They are each of them subjects of great importance, and from their frequent recurrence among us, are deserving of your most attentive consideration.

I had not resided long in this division of Lincolnshire, before I was strongly impressed with an idea that the inhabitants upon the wolds were a great deal exposed to idiopathic consumptions, and peculiarly liable to calculous complaints. In the division of Holland, and the extensive marshes of our county, these disorders are probably less known than in most *other situations* in England. Multiplied experience and numerous inquiries have tended to confirm these opinions; and since the establishment of our Dispensary, I have been collecting facts to elucidate them. The interruptions to which medical practitioners are continually exposed must plead an apology for laying

my

my ideas before you in a crude and imperfect form. Should my ſentiments be fortunate enough to meet your approbation, I ſhall return to the inquiry with freſh ardor, from a conviction thereby afforded that my obſervations will be uſeful to ſociety.

Phthiſical complaints are the great ſcourge of this iſland. Pulmonary conſumptions alone are reported annually to deſtroy upwards of twenty thouſand perſons.

How many of our countrymen are carried off by the other forms of hectical diſorders, I am unable to calculate; but their numbers are certainly very great. I would not be underſtood to aſſert that phthiſical complaints of all kinds are more prevalent upon the Woids. My obſervations have been chiefly directed to affections, which originate in ſcrofula, and theſe I am inclined to believe are much leſs frequent in the diviſion of Holland, than that of Lindſey. When it is conſidered that the victims to ſcrofulous affections are chiefly the fair and the delicate, who have arrived at an age to be uſeful to their friends, and promiſed by ſuperior mental endowments to be a bleſſing to the community, we cannot too much deplore and lament theſe premature deaths.

The ſituation of this town has afforded me numerous opportuniteis to inveſtigate more particularly pulmonary complaints, and I can truly aſſert that they are much leſs frequent in the fens and marſhes than in other parts of my circuit. The difference with reſpect to idiopathic conſumption is very great indeed: In ſome parts where I practiſe, it is a very common complaint, and in others it is ſcarcely known to the faculty. Pulmonary conſumptions are certainly to be met with every where; but when I have been conſulted upon ſuch caſes in our marſhes, or the diviſion of Holland, I could either trace them to other ſituations, to neglected colds, or ſome irregularity in the ſuffering perſon.

Conſumptions from theſe cauſes are occaſioned by accidents to which all perſons are expoſed in their commerce with the world. It is not to them that I refer; it is to the florid and tubercular conſumptions alone that my obſervations are directed. Theſe are ſo much the effects of prediſpoſition, and are ſo inſidious in their attacks, that it is very difficult, if not impoſſible, to prevail upon invalids to adopt precautionary regulations ſufficiently early to prevent their deſtructive and fatal conſequences. Arguments are inſufficient to alarm the phthiſical, and make him alive to his dangerous ſituation. The mind is too confident to be moved by admonition. Nay, when the complaint is fully eſtabliſhed, and has made conſiderable progreſs, the patient ſtill continues free from apprehenſions, and cannot be made

made to perceive the unavoidable mortality which awaits him. In these melancholy cases, there is no safety but in flight. The sufferer must either be removed into another air, or little good can be expected. Happily, the approach of the disease may commonly be distinguished while the constitution is so little injured that a cure may be reasonably anticipated. This in my opinion will never be accomplished by enclosing patients in rooms filled with medicated air, or a reduced atmosphere. The effects of such discipline are too transient to produce any permanent change upon diseased lungs. When immersion is finished, and the patient returns again to a common atmosphere, I should even be disposed to apprehend bad consequences from the sudden transition. If we can fortunately discover any district, where idiopathic consumptions are entirely unknown, we may expect that such patients will derive great benefit from removing to it, and residing there, till their sufferings be removed, and good health completely restored.

When I first took up the opinion, that pulmonary consumptions were seldom produced in the division of Holland, I applied for information, among others, to Mr. Wayet, an old and experienced practitioner at Boston, who informed me that pulmonary complaints of all kinds were very uncommon in his neighbourhood, and that such as did occur were milder than in other places. In an extensive practice of more than forty years, he had seldom attended in cases of peripneumony, or spasmodic asthma; and measles, he observes, were seldom dangerous in that part of the country.

This opinion of Mr. Wayet is agreeable to my own experience, and that of several medical practitioners with whom I have conversed upon this interesting subject. I accidentally mentioned it, a few years since, in the company of Mr. Boucherett, Member of Parliament for Great Grimsby, a gentleman of unbounded candor, and a most benevolent disposition. He was so much struck with the remark, that he took an opportunity to make inquiries concerning it among his Dutch friends, and was informed that consumptive disorders seldom occurred among them. From the great resemblance of the soil and air in the Batavian republic and the Lincolnshire fens, I am disposed to believe, that the exemption from phthisical complaints, in both countries, depend upon the same causes. In the lower parts of this county the air is moist and soft, when compared with the atmosphere upon the Wolds; the lungs are therefore less irritated in it, and in consequence, as I conceive, tubercles, which lay the foundation of idiopathic consumptions in other places, are seldom met with in these situations.

Sheep, it is well known, are liable to be affected with tuber-

cles in the lungs, and to die hectical. By what morbid action tubercles are formed in these animals, and whether they remain indolent for some time, or are roused into immediate action, are subjects upon which I can give no satisfactory information. In human lungs, the suppurative process is often very slow. Unless the lungs be hurried into suppuration by mismanagement or irregularities, they remain stationary for several years, and, under favorable circumstances, appear to be gradually absorbed. In every case where the existence of tubercles is suspected, I should recommend the patient to remove into a soft moist atmosphere, where the lungs will be less stimulated; and to remain in it till he has reason to believe that the tubercles are entirely removed. Whether more eligible places are to be found in other parts of the kingdom, I am unable to determine; but till we have obtained better information upon the subject, I am disposed to recommend a residence in the Lincolnshire fens to such patients, in preference to every situation with which I am acquainted.

By making experiments upon sheep in different districts, situations and circumstances, I am disposed to believe that some comparative knowledge would be obtained, which might assist our inquiries into the prevention and cure of tubercular consumptions in the human body. If, for example, a flock of sheep were to be bred, and wholly maintained upon the Wolds till they were fit for the butcher, and another were to be kept in the fens, an opportunity would be given to examine the lungs in each, and to determine how far the different flocks were affected by their respective pasturage. Such an inquiry would probably enable us to treat the diseases of sheep with more success, and thus a double benefit be conferred upon society by the investigation.

In January, 1793, a young lady, aged about twenty, who had been my patient several months, with very strong symptoms of florid consumption, went upon a visit into the neighbourhood of Wisbeach, in the Isle of Ely. While under my care she had continual pains in the chest, with a short dry cough, the sputum being generally streaked with blood. Motion soon fatigued her, and increased the dyspnœa and cough; she evidently lost flesh and strength, and in an afternoon and evening she had a slight hectical fit. Her being of a consumptive family, I considered as affording a *prognostic* unfavourable to her recovery. After an absence of three months, she returned again so much improved in health, that she thought herself quite well. She took up her residence at an elevated village in this neighbourhood. I frequently saw her, and had the mortification to observe an insidious attack of all her old symptom

toms. Before the end of the fummer, I thought her as bad as ever fhe had been, and urged her to return to her friends near Wifbeach. With this advice fhe neglected to comply for two years, during which time her fymptoms rather increafed than abated. After a fecond vifit of near four months, in the winter and fpring 1795, fhe returned again to her relations, where fhe continued feveral years without fuffering much from phthifical complaints, though her conftitution remained infirm, and her complexion was pale and fallow. About two years ago fhe married, and now refides in a diftant county, where fhe enjoys better health, and is become a mother. I have been told by a medical acquaintance, that an apothecary's wife was feveral times fnatched from impending confumption, by removing from Lynn Regis to Wifbeach. Her relief was fo ftriking and immediate, that before fhe had travelled three miles, fhe always found herfelf better, and in a few days her pectoral diforder entirely left her. Senfible of the great benefit fhe received from *this particular change* of air, fhe had recourfe to it, whenever affaulted by her phthifical fymptoms.

Should my opinion be confirmed, that idiopathic confumption is a very uncommon difeafe in our fens and marfhes, it will be a matter of great confequence to inveftigate the caufe of this exemption, and determine how far it ought to be imputed to the atmofphere alone, or to it in conjunction with other powers. It is a fubject of vaft importance, and will, I hope, receive the attention that it deferves. For my own part, I fhall be thankful for every communication, which has any tendency to confirm or overturn the theory that I have propofed, as it is my intention, at fome future period, to enter more fully upon the inquiry.

Permit me, before I conclude this Addrefs, to congratulate you upon the repeal of the Income Tax, a tax which however neceffary, certainly preffed more upon medical men than many other claffes of the community. Inconfiderate people may imagine, that in contributing for our profeffional receipts, we paid for no more than our profits and gains. A little reflexion will fatisfy the candid and unprejudiced, that of late years, efpecially horfes and fervants, independent of the taxes upon them, could not be maintained for a trifling fum; and yet it is impoffible to conduct a very moderate bufinefs in many fituations without them. Thefe, with other mifcellaneous expences, when added together, amount annually to no fmall fum, and are fo unavoidably connected with medical practice, that without incurring them, the emoluments could not have been at all obtained. Their previous fubftraction was therefore abfolutely neceffary

to

to bring the receipts themſelves under the denomination of profits and gains.

Income, in its uſual acceptation, is a looſe and vague term; it applies equally to groſs receipts and to net produce: But when the Legiſlature had limited it to be ſynonimous with profits and gains, it became as clear and preciſe as any other word in the Engliſh language. By ſuch a definition, it was reſtricted in the act, as I conceive, to mean only net produce, or the ſum that remains to profeſſional men, after their neceſſary and unavoidable expences had been previouſly ſubtracted.

In addition to theſe I might ſtate, that the Faculty are expoſed to ſo many caſualties which do not affect other employments, that no receipts are more precarious than ours, or require to be eſtimated with more delicacy. A fit of ſickneſs, to which, in the exerciſe of our profeſſion, we are peculiarly expoſed; any accident that produces confinement, or the unexpected termination of ſome particular caſe, are each of them ſufficient to curtail the emoluments of the moſt able and popular practitioner.

Any obſervations upon a repealed act of parliament may be eſteemed ſuperfluous and irrevelant; but as there is reaſon to believe that a tax upon income will at ſome time be among the reſources for a new war, I thought a few remarks upon the late bill might not be inapplicable to the preſent occaſion, or foreign to the buſineſs of this day.

I have thus delivered to you my ſentiments without any reſerve. I had likewiſe intended at this meeting to offer ſome remarks about calculous and intermittent diſorders. Theſe, however, I am obliged to defer till another opportunity; and in the mean time I ſhall be happy to receive any communications about them, or the other ſubjects concerning which I have preſumed to addreſs you.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

WHEN I had the pleaſure to tranſmit to you the Report of Mrs. Haſlewood's caſe, I could not ſuſpect that any part of my Paper would excite diſpleaſure in the mind of any party concerned; but Mr. Congreve deemed himſelf injured by a paſſage that he thought admitted of an invidious interpretation; it is as follows: "About a week after, on the annual change of pariſh

officers

officers taking place, I was nominated to the ſuperintendance of the poor, and felt myſelf happy in the opportunity afforded me of inveſtigating this caſe by a ſcrutinizing inquiry."

This was ſuppoſed to imply a deficiency of talent or attention in Mr. C. I am, Gentlemen, too jealous of my profeſſional honour to permit any man to trifle with it; and have, I hope, too juſt a ſenſe of what I owe my brethren to make a wilful and unprovoked attack on the character of a medical man. I had not the moſt remote cauſe to cenſure Mr. C.; and all I meant by the paſſage alluded to was, that as the caſe was extremely obſcure, I was glad to have it under my own immediate controul. Another paſſage too has been conſidered exceptionable, and is ſuppoſed to imply that Mr. Congreve, as well as the Gentlemen of the Surrey Diſpenſary, and of Guy's Hoſpital, are all culpable for not performing ſome operation to relieve the patient; it runs thus: "What the event of an earlier operation might have been we can only ſurmiſe, &c. &c." But let it be attended to, that the caſe was under my own care for ſome time before I thought proper to operate, and therefore the paſſage is as applicable to myſelf as to others, which conſideration reduces the ſuppoſition to an abſurdity.

Conſcious as I am that I never intended a perſonality, I think myſelf peculiarly unfortunate in being ſo egregiouſly miſunderſtood. I aſſure you, Gentlemen, that if an unhappy *necessity* ever ſhould ariſe to expoſe the incapacity or inhumanity of a fellow member of the Faculty, I will do it boldly, without reſerve or inuendo, without reſpect to perſons or authority; but I diſclaim every preſumption of improper treatment in the conduct of Mr. C. or any of thoſe gentlemen in whoſe caſe Mrs. Haſlewood was, previous to her coming into Gillingham poor-houſe. Her caſe was ſo truly intricate as to juſtify any diverſity of opinion, or peculiarity of management.

Diſmiſſing this unwelcome ſubject, I now beg leave to introduce the following letter, which I laſt night received from Dr. Vaughan; and as it may throw ſome light on Mrs. Haſlewood's caſe, I offer it to your attention, requeſting you will inſert it.

"Dear Sir, *Rochester, August 10, 1802.*

I am pleaſed to find that, after examining the body of Mrs. Haſlewood, you have thought it a duty incumbent upon you to draw up a ſtatement of her whole caſe.

All that fell under the cognizance of my ſenſes when I paid her a viſit at your requeſt, and all that ſhe then related concerning her diſorder, was not ſufficient ground for me whereon to

to found a judgment. The hiſtory of her diſeaſe may be thus began with the account given by her ſiſter: "Six months ago ſhe had a fever, after which ſhe did not menſtruate, and the whole abdomen became enlarged; but on lifting too heavy a weight, ſhe brought on an exceſſive flow of menſes for a fortnight; and immediately preceding that time her thigh and leg began to ſwell," p. 47. But even in this exordial account there ariſes a doubt, whether the ſtoppage of the menſes, and the enlargement of the whole abdomen, were connected as cauſe and effect? And alſo, whether this enlargement of the abdomen was removed as ſoon as the menſes had flowed exceſſively for a fortnight?

There would, I believe, have been leſs obſcurity in Mrs. Haſlewood's caſe, if ſhe herſelf had not, all along, confounded the two ſwellings of the *abdomen* with each other; and if ſhe had not forgotten to mention the fever that had preceded the ſwelling of the whole *abdomen*, or the too heavy weight that ſhe had lifted before the ſwelling of the thigh and leg commenced; for the three ſwellings were, it would ſeem, diſtinct, and proceeding from different cauſes. The ſwelling of the whole *abdomen* was the firſt in order, and it was probably *ascites*; the ſwelling of the thigh and leg was next in order, and it was *oedema*; the third and laſt was that ſwelling in the right ſide of the *abdomen*, which you found as big as a fiſt, and rightly imagined to be encyſted. Whether theſe three diſeaſes were at any time all of them co-exiſtent or not, we are not informed; but that they became ſo at laſt, although in different degrees, is, ſince the Diſſection, highly probable.

And yet there would have been conſiderable obſcurity, let the ſymptoms have been ever ſo minutely detailed, and the particular relation of them, one to another, have been ever ſo impreſſively ſtated. Thus, as the ſwelling of the whole *abdomen* was not obſerved by either you or me, we know not what we ſhould have thought of it. Could we have referred it to that ſuppreſſion of the *menses*, which immediately preceded it; or to the fever, which immediately preceded the ſuppreſſion of the *menses?* I am now diſpoſed to ſuſpect that there was ſome diſeaſe of the *peritonæum*, or of the liver or ſpleen; that hydatids were formed in the *abdomen*, and that their burſting and diſcharging their contents produced a kind of *ascites*. (See Medical Tranſ. ii. 497:) This is conjecture I admit; but how often do we meet with patients complaining of fever only, in whom we diſcover quickly and clearly the ſymptoms or conſequences of inflammation. It is not vague conjecture then; nor can it be deemed improbable, when it is reflected that your trocar made an outlet for *serum*, containing fragments of hydatids,—

tids,—"flocules refembling the coagulated lymph often found in the abdomen, &c." "A portion of membrane refembling part of a fac or cyft," p. 46; and that the tumour in the *vagina* (Denman's Midwifery) as well as that of the abdomen, fubfided after your operation.

Again, the fwelling of the thigh and leg came on a fortnight exactly after the commencement of the uterine hæmorrhage. Did this fwelling enfue from a ftrain in lifting the heavy weight? If fo, why did it not appear fooner? If it depended on the hæmorrhage, why did not both thighs fwell, and indeed the whole body?

And again, Mrs. Haflewood had always complained of a pain in her loins; during the fever; during the fubfequent fwelling of the whole *abdomen*; after the lifting of the weight too heavy for her ftrength; during the hæmorrhage; and, in a word, till death put an end to it and her life. This pain was not exaggerated after fhe had lifted the weight; therefore, as the fwelling of the thigh was evidently not owing to any matter that had defcended with the *psoas* mufcle under Poupart's ligament, but to lymph in the reticular membrane; and as the pain of the loins did not feem to be at all connected with this fwelling of the thigh and leg; and as no fwelling had yet appeared in the right fide of the *abdomen*, there was nothing like a reafon for fuppofing the exiftence of a *psoas* abfcefs. There was an *œdema* of the thigh and leg, and blifters had accordingly been applied. What internal medicines had been directed while fhe ftaid in London, fhe knew not; but we may fairly conclude, that the object of them was to increafe abforption, and to reftore ftrength.

To proceed with the hiftory. A fhort time after the thigh and leg began to enlarge, fhe felt a hard body, nearly the fize of a large marble, in the fame fide of the abdomen, p. 45. Here there is evidently a chafm, but I fuppofe not a great or material one, between Mrs. Haflewood's account of this tumour and your account of it. I fhall continue to quote your words, as the Medical and Phyfical Journal may not be at hand. "The tumour of the abdomen, which had been rapidly increafing, was then about the fize of the hand when clenched; it evidently contained a fluid, and was fo circumfcribed in its external form as to leave but little doubt as to its being contained in a fac or cyft. It was fituated above the tendon of the oblique mufcle, ftretching from thence obliquely upwards, and towards the ileum: it was not difcoloured. The thigh, which was bent towards the abdomen, was much enlarged; the leg alfo was fwelled, very painful, and the knee bent. The tumour was not fo exquifitely tender; nor did fhe at any time fuffer fo much

much pain there as in the extremity. She complained of pain in the loins; ſhe could not paſs urine except when on her hands and knees, and then in ſmall qnantity, and much diſtreſs. She had not any inteſtinal evacuation, but when an enema was adminiſtered; ſhe had not menſtruated ſince the commencement of her complaint. Her breaſts were abſolutely gone; her pulſe was ſmall and quick: ſhe was much emaciated; had the hippocratic countenance; and without the aid of opiates, her nights were ſleepleſs." Page 44. Now this is not the commoneſt preſentation for a *psoas* abſceſs, becauſe the purulent matter deſcending through the reticular membrane makes a tumour commonly in the thigh by elevating its *fascia*, or near the loins, or at the hip-joint, or in the groin, or ſomewhere about the *rectum*. Mrs. Haſlewood's caſe, however, offers, in this particular, no knot which we cannot eaſily looſen. All know that matter formed near the *psoas* muſcle may inſinuate itſelf between the three *strata* of abdominal muſcles; and I think it is moſt likely to do ſo, when the patient is, as Mrs. Haſlewood had long been, almoſt entirely confined by a previous diſeaſe to a horizontal poſition of the body; and a horizontal poſition, or even preſſure, did not leſſen the tumour; nor did a cough give the perception of a fluid impelled from the loins; nor were the kidney and ureter of the right ſide only affected; all which circumſtances generally concur to characteriſe a *psoas* abſceſs. Beſides, the inflammatory ſymptoms muſt have been unuſually ſlight; and the ſuppurative proceſs does not ſeem to have been even felt by the patient herſelf; for of neither is the leaſt mention made in the hiſtory of her caſe.

In your relation of the morbid appearances, you ſay, "The iſchium from the ſpinous proceſs upwards, the ſacrum, and the lumbar vertebrae, where ſome pus was lodged, were all carious." Surely, *caries* of the adjacent bones is no common effect of the matter of a lumbar abſceſs. I cannot, I declare, help thinking that the pus here collected, was rather the effect of the carious *vertebrae*; and the pain you deſcribe, "as cauſed by preſſure or diſeaſe of the iſchiadic nerve," I ſuſpect would ſhortly, if ſhe had lived, ended in a palſy of both the lower extremities.

Before I quit this ſubject, I muſt obſerve, that you ſpeak of "a condenſation of the cellular membrane forming the parietes of the tumour, &c. p. 47. Do you not believe the cyſt of every abſceſs to be formed by what Mr. Hunter calls adheſive inflammation?

I am now come to conſider, not your opinion that Mrs. Haſlewood had an ovarian dropſy, (enough having been already advanced concerning the ſymptoms of her diſeaſe, and alſo concerning

cerning their agreement with the morbid changes of ſtructure,) but your animadverſions on my objections to that opinion.

Speaking of me, you ſtate, "I mentioned to the Doctor my opinion of its being an ovarian dropſy, and thought that opinion ſtrengthened by the circumſtance of her having loſt her breaſts, and ceaſed to menſtruate about the beginning of her complaint; but he did not coincide with me in idea that the ovaria were ſtrictly neceſſary to menſtruation, and moreover urged that the left ovarium offered no appearance of diſeaſe." p. 45.

The fact is, I did not aſſent to your opinion, becauſe the ſymptoms of her diſeaſe did not ſeem to me to be ſuch as diſtinguiſh the dropſy of an *ovarium*. And as for the ſubſidence of her breaſts, and the ceſſation of menſtruation, which you adduced in ſupport of your opinion; the former was, I thought, only a part of the general affection of the ſyſtem, for ſhe was miſerably emaciated; and the latter was not noticed, as I could recollect, by any good author as a pathagnomonic ſign of this dropſy. An irregularity in menſtruation does indeed occur in the advanced ſtage of this diſeaſe, but then it is only a ſymptom of cachexy. Mention is made by Morgagni from Gullman, of a virgin, whoſe *menses* were regular, although ſhe had laboured under the dropſy of an *ovarium* for fifteen years; and from Targioni, of a matron who ſuffered this diſeaſe thirty-four years, in whom the *menses* were exceſſive. A perſon may have the dropſy of an *ovarium* for a long time, without the health being much impaired; thus Morgagni relates a caſe, in which after the dropſy was evinced by a tumor in the abdomen, the woman conceived, was happily delivered, and remained long afterwards alert, ſprightly, and robuſt. *(De Sedibus et Causis Morborum, &c. Ep.* 38, *Art.* 64.*)*

The words "but he did not coincide with me in idea that the ovaria were ſtrictly neceſſary to menſtruation, and moreover urged that the left ovarium offered no appearance of diſeaſe," ſeem to me to convey a meaning ſomewhat ambiguous. I confeſs, I do not underſtand them. I believe the *menses* to be a ſecretion from the arteries of the *uterus* itſelf, i. e. the hypogaſtric; and this belief I publiſhed more than eleven years ago, in the notes to my tranſlation of *Leber's Prælectiones Anatomicæ*. In the ſame notes too, I adopted the opinion of Mr. Hunter, that the *ovaria* and their appendages conſtitute the female ſex, (vol. ii.) and I never dreamt that the *ovaria*, the Fallopian tubes, and the *uterus*, were not in a ſimultaneous action during a fruitful coition. Really then, if you think, that the total deſtruction of the *ovaria* will ſtop menſtruation and induce barrenneſs, I never thought otherwiſe. But this does not

not prove, that the *ovaria* have more to do with menſtruation than the Fallopian tubes have. If the Fallopian tubes be divided, ſo that the *ovum* has no paſſage for its deſcent to the *uterus*, the *ovaria*, becauſe rendered uſeleſs, will ſhrink; the inclination for the male will ceaſe; nor will even the *uterus* form a *membrana decidua*, though coition be performed ever ſo vigorouſly.

It is plain then, why I told you that one of the *ovaria* manifeſted no morbid action; one teſticle is enough for generation, and ſo is one Fallopian tube. Experience as well as analogy proves this; for Mr. Hunter found that when one *ovarium* was taken away, the conſtitution made the remaining one produce its number of young in a leſs time, (Phil. Tranſ. vol. lxxvii.); and another Anatomiſt has diſcovered, that when one Fallopian tube is deſtroyed, there is no impediment to conception; nay, *corpora lutea* may be ſeen in the uſeleſs *ovarium*.

I am, &c.

W. VAUGHAN."

The firſt point that I beg leave to notice in the Doctor's letter is, his doubt reſpecting my meaning when I ſpeak of "a condenſation of the cellular membrane forming the parietes of the tumor, &c. &c." By this condenſation I wiſhed to be underſtood the boundary of the abſceſs on that ſide, and to denote that the rectum, vagina, Fallopian tube, ovary, and uterus, were not *immersed* in *matter*, but were protected by cellular membrane. Whether the parietes of an abſceſs be the effect of inflammatory adheſion, or of condenſation, owing to the abſorption of the fluid contained in the cellular membrane, produced by preſſure, may admit of ſome controverſy, although the modern Oracle of Delphos has pronounced the former as univerſal.

I think myſelf indiſpenſably called upon to ſtate my reaſons in ſupport of the opinion I have long entertained, that the ovaria are the organs of menſtruation, becauſe a part of the Doctor's letter is founded on a belief that my conjecture is erroneous.

Before I proceed however, I beg to be underſtood, that the principal circumſtances in Mrs. H's caſe, on which I grounded my idea that it was an ovarian dropſy, were, the form and ſituation of the tumor. Other concomitant ſymptoms I thought corroborated my conjecture. Amongſt them I numbered the ceſſation of the menſes and the flaccidity (or rather *annihilation*) of the breaſts. The ovarium of the left ſide, I preſumed, had ceaſed its functions by ſympathy with the diſeaſed one of the right, never doubting the *poſſibility* of ſuch aſſociation. But to revert to the ſubject in queſtion.

The

The Reafons for my fuppofition, and to which I wifh to call the attention of Phyfiologifts, are as follow. When a fow or bitch is fpayed, fhe never fecretes that difcharge which allures the male and excites to copulation. May not this fecretion be the effect of a vafcular orgafm, bearing fome analogy to the menfes; for if it was vaginal, or uterine, the extirpation of the ovaria could not prevent its periodical recurrence. Does not a venereal orgafm take place in birds at the vernal period? and in moft other oviparous animals at feafons peculiar to the refpective organizations? I do prefume, (but with a refpectful deference to my fuperiors in information) that what is termed the uterus in the oviparous tribes is not properly fuch; it performs fcarcely any of the functions common to the viviparous uterus; it is merely a receptacle for the ovum until the parts of the embryon are formed; the ovum is then caft off, and the augmentation in bulk, with the perfection of organization, are left to chance or accident. But although they have not diftinct and proper uteri, in the ftrict acceptation of the term, they have ovaria, and thefe I prefume are the feat of their venereal orgafm. It is, I believe, univerfally acknowledged, that a female who never menftruates is always fterile, and that the period of menftruating power is correfpondent with the generating power. From about the age of fourteen to forty-five years, conftitutes the general limit of thefe abilities in this climate.

Let us now combine the following facts:

Firft, Viviparous and oviparous animals cannot generate their fpecies without the ovaria.

Second, Many viviparous animals are fubject to periodical venereal orgafm, which is prevented by extirpation of the ovaria.

Third, The generating and menftruating powers are coeval and coexiftent in the human fubject.

If then, in the firft inftance, the ovaria are neceffary to propagation, and in the fecond to venereal orgafm, do we not, by aid of the third, approximate to an analogy between the menftrual fecretion of the human, and the venereal orgafm of the brute animal? If this analogy is fuppofed to be eftablifhed, I prefume we may conclude, that as in the firft inftance, generation cannot take place without the ovaria; in the fecond, they are requifite to venereal orgafm, or that fecretion which feems to correfpond with the propagating propenfity or power; and in the laft, thofe powers are correlative; fo the menftrual fecretion of the human fubject, having an equal correfpondence with the power of generation, is alfo dependent on the ovaria. Quod erat demonftrandum. Do not thefe effects feem to arife from an identity of caufe, that is, a peculiar indifpenfable action of the ovaria? May not the ovaria and their appendages be in fuch a ftate as to be ineffectual to the purpofes of menftruation

and

and generation? Thus, then, I would account for the concomitance of theſe powers.

A female may be barren from a variety of cauſes, and unfortunately it can ſeldom be aſcertained whether the defect cauſing ſterility originates in herſelf or the male; but I am much inclined to believe, that it is moſt frequently imputable to the former. The dropſy of the ovarium, Dr. Denman ſays, occurs more commonly at the time of the ceſſation of the menſes than at any other period. It has immediately ſucceeded ſuppreſſion of that ſecretion. I may add too, that at the final ceſſation the ovaria become contracted and rather indurated. All of which circumſtances have a tendency to fortify our propoſition.

In the caſes adduced by Dr. Vaughan, to prove the fallacy of my opinion, *one* ovarium only was diſeaſed; and his other obſervations ſhew the poſſibility of a ſolitary organ being in ſome caſes efficient to the performance of functions that both were intended to effect. I ought, indeed, to thank the Doctor for the additional teſtimony that he has been pleaſed to afford me, that when the ovaria are taken away, menſtruation ceaſes and barreneſs enſues. I could not wiſh for fairer evidence to eſtabliſh my conjecture, particularly as it comes from a gentleman not diſpoſed to favor it with his ſanction. Surely this acknowledgment muſt militate, in a formidable degree, againſt his concluſion, that the menſtrual diſcharge comes from the arteries of the uterus itſelf! Mr. Pott, who had no particular hypotheſis to ſupport, and whoſe reputation ſtood too high to require the artificial aid of candle-light caſes, records the hiſtory of a young woman who menſtruated regularly before ſhe had both the ovaria extirpated in conſequence of ovarian hernia, but ſubſequent to the time of the operation ſhe ceaſed to menſtruate in any degree. This is a caſe in point, which I judge juſtifies my ideas on the ſubject under conſideration, for had an experiment been inſtituted for the ſole purpoſe of aſcertaining the matter in queſtion, it could not have been more happily deviſed, nor could it have been more deciſively favourable to my conjecture.

Theſe facts, Gentlemen, impreſs on my mind a belief that the ovaria are the organs of menſtruation, as well as of the fabrication of the ovum. I muſt, however, beg my readers to conſider any imperfection in the above doctrine as in ſome meaſure imputable to the natural intricacy of the ſubject, and hope that if it is thought worthy of notice, it will be conſidered with impartiality, and combated with candor. If I am wrong, I will gratefully acknowledge my errors when conviction is offered me, and hold that gentleman my beſt friend, who is moſt ſucceſsful in detecting my erroneous poſitions. Be the event what it

it may, I ſhall be very happy if what I have noted leads to a full, juſt, and diſpaſſionate diſcuſſion of the queſtion, as the reſult may afford us more accurate ideas of menſtruation, and thereby enable us to treat with greater certainty of ſucceſs, at leaſt one of the manifold afflictions incident to the ſolacing partner of mankind.

It would be treſpaſſing too much on your time to lengthen this Communication by a detail of the manner in which I conceive the ovaria are effective to the menſtrual evacuation; I ſhall therefore defer it till a future opportunity, when I may, perhaps, be able to tranſmit to you an account of an examination, poſt mortem, of another lumbar abſceſs that is now under my care, and which is rapidly advancing the deſtruction of my patient.

I am, &c.

Gillingham, August 11, 1802. JOHN WILSON.

On the Use of Mercury in Diseases of the Liver; communicated by Mr. J. B. DAVIS, *of the Tower, London.*

MERCURY deſervedly holds a very high rank in the removal of chronic Obſtructions of the Viſcera, and I believe that I am not ſingular when I aſſert it is our ſheet anchor in the cure of the Schirrous Liver.

Previous, however, to ſpeaking of its beneficial influence on the various affections of that organ, I have taken the liberty to trouble you with a few precurſory obſervations relative to the diſeaſes of the hepatic ſyſtem. I think it too the more neceſſary to do this, as we are apt, from the common occurrence of bilious complaints, to diſregard many pains of the liver, upon a ſuppoſition of their being merely ſympathetic. We muſt all acknowledge, that no part is more eſſential to the well being of the animal economy than this; of courſe, then, none claims our attention with ſtricter propriety. Pain is often the only characteriſtic ſymptom of diſeaſe, as in cephalalgia, odontalgia, gaſtrodynia, arthritis, ſplenalgia, hepatalgia, &c. But what advantage, I would beg leave to aſk, will accrue to practice from ſuch information, unleſs the preciſe ſituation and probable cauſe of it be both thoroughly inveſtigated. Hippocrates ſays, "That whatever eſcapes the reach of our external ſight, ſhould be ſearched for, and overtaken by the eyes of the mind." Of what uſe is it to know that there is pain in the hypogaſtric region, if we do not at the ſame time learn whether it proceeds

ceeds from inflammation, obſtruction of the biliary ducts, or ſchirroſity. The neceſſity of ſuch a diſcrimination is the more ſtriking, when we reflect that a different mode of treatment is required in each. The ſize of the liver, and the collective area of veſſels containing blood for the ſeparation of bile, ſhew how large a quantity is carried there for that purpoſe; and if we only recollect the conſtant ſupply of bile required for chylification, and which indeed, in a ſtate of health, is continually going into the duodenum, it is a matter of perfect aſtoniſhment that the pori biliarii, owing to the tenacity of the ſecerned fluid, do not become more frequently obſtructed. The bile muſt flow uninterruptedly into the chylopoietic viſcera, as a conſtriction of the ductus choledochus has often painfully evinced.

If the healthy functions of the liver be not *suddenly* ſuſpended, and a part of its ſecretion flows through the proper channel into the duodenum, and another portion, comparatively ſmall, out at any external opening, ſtill the moſt vigorous animal would gradually decline, and in the event probably die. So true it is what Lord Bacon ſays, "That the bile is the incentive and ſtimulus of many functions of the body." Wounds in the gall bladder likewiſe convince us, how large a quantity of this fluid is ſecreted; and they alſo prove that the cyſtic bile, though not ſo conſtantly paſſing into the duodenum, cannot be loſt without equal danger. Without this uſeful ingredient the inteſtines no longer perform, with energy, their periſtaltic motion, the heterogenous ſubſtances contained in the aliment do not unite, nor is the chyle duly mixed for the reception of the lacteals, or the nutrition of the animal.

The qualities of the bile ſhould be thoſe of a natural ſoap, intimately combining with the oily and watery particles of the chyle in its paſſage through the duodenum; but when the blood has been heated and rendered acrimonious by hard drinking, violent exerciſe, or warmth of climate, the properties of it are ſo much changed, and rendered ſo very ſtimulating, that inſtead of anſwering ſuch a ſalutary end, it will infallibly create pain and irritation.

In the event of ſpaſm of the ductus choledochus, Nature relieves herſelf by an abſorption of the finer particles; but this effort, unleſs the uſual channel is ſoon reſtored, will be inadequate to the ſuſpenſion of head-ach, vomiting, pain, and other equally diſtreſſing ſymptoms. A warm climate neceſſarily heightens the alkaleſcent particles of the bile; but they are doubtleſs made much more ſo by a too liberal uſe of ardent ſpirits, and a frequent ſtoppage of ordinary perſpiration from whatever cauſe it may proceed.

Nothing

Nothing is ſo difficult as to perſuade hard drinkers to forego their favourite purſuit; and if they ſhould even have courage to improve by the hint, it is more than probable, that the cuſtom would have already laid the baſis of that diſeaſe, which will ever after require the greateſt care on their part, and the ſkill of the moſt judicious phyſician, to keep within bounds.*

—— Eripe turpi
Colla jugo, liber liber ſum, dic age. HOR. SAT. 7.

—— Video meliora proboque
Deteriora ſequor. OVID. MET.

Some people are ſo liable to a ſuffuſion of bile, that cold, irregularity of any kind, or trifling indiſpoſition, checking the healthy actions of the conſtitution, would immediately bring on an attack preceded by ſevere pains in the ſide. Others, who are ſubject to gall-ſtones, are, from the ſame ſuſceptibility, ſcarcely ever free from local pain and irritation. The latter acting upon the hepatic ſyſtem, is, agreeably to the doctrine of Doctor Gottlieb Richter, the cauſe of icterus, and may ariſe from concretions, ſpaſm, inflammation, or whatever impedes the flow of bile through the pori biliarii. A ſuffuſion of this kind is for the moſt part of temporary duration, and the ſurcharge which the blood ſuſtains ſoon carried off by the ſkin or bowels. When an obſtruction is allowed to remain, the finer particles gradually find their way into the circulation, and thus a niſus is left for the formation of a ſtone. During this time, I conceive the ſymptoms of jaundice may recur very often, and with equal ſeverity, as if a ſmall gall-ſtone was paſſing through the duct.

Spaſm of the ductus choledochus is frequently very acute, and aſcertained by being deeply ſeated between the ribs and and dorſal vertebræ. It was the practice of the celebrated Hoffman to bleed at the commencement of an attack, purge, give antimonials, ſoluble and cream of tartar, diluents, &c. and it appears indeed, from experience, to be the moſt judicious treatment which could poſſibly be deviſed.

The great deſideratum, on the acceſs of ſevere ſymptoms, is the removal of pain and irritation, events not very likely to happen without firſt making liberal evacuations. All irritants, therefore,

* Medicine can be of but little ſervice, when patients obſtinately perſiſt in ſuch an injurious practice. The Grecians were very ſtrict with reſpect to the conduct of ſick people. "A capital puniſhment uſed to be inflicted by the Locrians on the patient for diſobedience to the advice and orders of his phyſician." So great was the reverence ſhown to the healing art in all Greece, and at Athens in particular.

fore muſt, for obvious reaſons, be precluded till tenſion is removed, and then they may probably be preſcribed with great advantage. A calomel purge is uſeful in the beginning, and may be adminiſtered with perfect ſafety. This, however, is not the affection of the liver wherein mercury is of ſuch decided ſervice, though I have known it do a great deal of good towards the end of the paroxyſm. It is deſervedly held in high eſtimation as an alterative, and with this view may be preſcribed in ſmall doſes, to be taken every night for a fortnight or three weeks, then diſcontinued, and after a proper interval reſumed, taking care to carry off its effects with caſtor oil or Epſom ſalts, once in five or ſix days. I think a grain of calomel, a grain of ipecacuanha, and two grains of ſoap, is an excellent compoſition.

By this plan, and a ſuitable mode of living, a recurrence of the complaint is not unfrequently ſuſpended for many months. At the heighth of ſpaſm, laudanum ſtands unrivalled, and ought certainly to be exhibited till the violence of pain abates. Now and then the ſtomach is too irritable to retain it, in either a ſolid or a liquid form, and then I have generally had recourſe to the extract of poppies, which has oftener than once ſucceeded in allaying the uneaſineſs of the ſtomach, and overcoming ſpaſm. This extract is not generally uſed in practice; a circumſtance which I much regret, as it would be found a uſeful ſubſtitute in thoſe caſes wherein opium was rejected or diſagreed with the patient's conſtitution.

"Tho' mixt with wheat I grow,
Indulgent Ceres knew my worth,
And to adorn the teaming earth
She bad the poppy blow.
Seize, happy mortal, ſeize the good;
My hand ſupplies thy ſleep and food,
And makes thee truly bleſt;
With plenteous meats enjoy the day,
In ſlumbers paſs the night away,
And leave to Fate the reſt."

There are other bilious perſons who cannot take the lighteſt food without ſuffering internal heat, flatulence, ſickneſs, and occaſionally pains in the head and ſide. Their ſkin commonly has a yellow tinge, and the tunica conjunctiva partakes of the ſame hue; but I have remarked that theſe people are ſeldom ſo ill as to have a regular attack of jaundice, or be ſeriouſly troubled with gall ſtones.* The circulation is very languid in them, and the bile remarkably thick. The fluctuation of ſpirits which theſe patients are ſo liable to, treating their com-

* ——— "Facies non omnibus una
Nec diverſa tamen."

plaints with indifference at one time and ſeriouſneſs at another, gives them the character of Hypochondriacs; yet in no other reſpect do they particularly reſemble thoſe unfortunate Beings. I have no doubt of their being ſome fault in the bile, though I cannot avoid thinking that "ægrotant animo magis quam corpore."

Exceſſes are very injurious in *a healthy conſtitution*, and much more ſo in habits like theſe, already reduced by irritation and mental inquietude. Private entertainments, ſumptuous feaſts, long walks, then ſudden abſtemiouſneſs and perfect reſt, are all equally injurious, and will, by gradually overcoming the natural elaſticity of the ſolids, ſooner or later, render the fluids unfit for the various purpoſes of the animal œconomy.

Cum labor extuderit faſtidia, ſiccus, inanis,
Sperne cibum vilem; niſi Hymettia mella Falerno
Ne biberis diluta. HOR. lib. 2.

I coincide with Dr. Cullen, in its being an object of the firſt conſideration, to amuſe the mind at the time you are ſtriking at the root of the real malady. The patient may have unneceſſary fears, and then treat his true complaint with altogether as much levity; but be that as it may, the Practitioner will obtain great advantage by allaying mental irritation. Idle perſons, who fare luxuriouſly, and are irregular in their general mode of living, are thoſe to whom I allude, and not ſuch as are engaged in ſedentary employments, or have had their ſpirits broken by frequent troubles and diſappointments.

In all theſe caſes, in my poor opinion, regular exerciſe ought to be enjoined with every perſuaſive argument which the medical attendant can ſeaſonably apply.* I have witneſſed the recovery of ſeveral patients by ſending them ſome diſtance, three or four times a week, to drink the water of any chalybeate ſpring. The ſtomach is thereby braced, the mind amuſed, and the circulation reſtored. The medicines which ſucceed beſt in theſe caſes are warm cathartics, ſmall doſes of calomel, ipecacuanha, and rhubarb. The habit being thus previouſly corrected, colomba, gentian, chamomile flowers, quaſſia, aloetic wines, and other ſtomachics, ſtrengthen the tone of the viſcera, and promote healthy ſecretions. If ſpaſm ſhould attack the ductus choledochus, or pain take dominion of the liver, neither of which are very uncommon in a confined ſtate of the bowels, I have almoſt always procured temporary relief from Hoffman's anodyne

* The ancients attributed the greateſt utility to exerciſe properly regulated, and ſo indeed do the moderns. The great Sydenham declares, "that mercury for Lues Venerea, nor bark for the Intermittents, are not more certain ſpecifics than riding on horſeback for a conſumption." What benefit then are not bilious people likely to derive from moderate bodily exertion!

dyne liquor, and a ſmall quantity of luadanum; or, if theſe failed, camphor, julep, and ſpt. ammon co. After fomenting the ſide with a decoction of poppy heads and chamomile flowers, a warm plaſter put upon the right hypochondrium often procures eaſe. Sometimes an embrocation of ſpt. camph. tinct. canth. and aq. ammon. does more good.

A diet conſiſting of plain wholeſome food, and after dinner two or three glaſſes of generous wine, provided the patient has long been in the habit of taking it, will be more conducive to health than a catalogue of the moſt valuable compoſitions. If you do not chooſe to place your whole dependence upon it, you ſhould at leaſt take care that it is ſuch as will aſſiſt the operation of medicine, or in no ſhape whatever counteract its effects. Galen aſſerts, that "That medicine has no efficacious remedy which can bring any permanent aſſiſtance if the mode of living ſhould reſiſt it, or ſhould not act in conformity, and become an uſeful auxiliary. By diætetic remedies, he ſays, that he has overcome the moſt obſtinate chronic diſeaſes, which have been treated in vain by medicines elegantly compounded, and judiciouſly adminiſtered. This correſponds with the old adage,

"Cur Moriatur homo, cui Salvia creſcit in horto."

Piles are not unfrequently the conſequence of an obſtructed egreſs of the bile, and ſhould therefore be repelled with the greateſt caution.

As the natural channel is reſtored by the means before mentioned, the hæmorrhoids ceaſe or recur but ſeldom. They are entirely ſymptomatic of ſome accumulation in the liver,* and are preceded by a ſevere pain in the ſide, which, for the moſt part, abates as hæmorrhagy comes on.

When once the functions of the liver have been perverted, and morbid action gained a gradual aſcendency, the hepatic ſyſtem, like other parts of the human body, though completely reſtored to its original ſtate, is ever after liable to relapſe; a circumſtance which the patient as well as practitioner ſhould be well aware of. Inattention to this point have led many to ſay, in a ſhort time, with Juvenal,

"Plus aloes quam Mellis habet."

Gall ſtones generally excite a vaſt deal of pain in their way to the duodenum, and that, in proportion to the irritability of the ductus choledochus. I have known concretions, of a peculiar kind, voided, which produed very little uneaſineſs;

* I do not mean by this inference to aſſert that ſuch an accumulation is the general cauſe of piles.

 but

but whenever the calculous matter is rough and hard, it cannot fail of exciting considerable pain. The head is often seized with shooting pains, and a sensation of something girting it, and the diaphragm has momentarily ceased to act from the irritation of a small quantity of fine gravel or sand.

I am acquainted with a lady who is attacked almost every month with a violent head-ach, pain in the side, and vomiting, which continue two or three days, sometimes longer, and then gradually subside as the calculous matter is rejected from the stomach, or carried off by the bowels. A dark substance, of an irregular figure, is now and then brought up in the act of vomiting. Until this is removed she finds no ease, and laudanum, the sine qua non for the mitigation of spasm, almost distracts her. Mercurials and the whole list of antibilious medicines have been tried, with the Bath, Cheltenham, and Tunbridge waters; but all, I am sorry to say, to little purpose. The most relief has been procured from calomel and soap combined, stimulating liniments to the side, and brisk purges. The bowels are always torpid, and require strong aperients. This lady was inclined to be bilious at a very early period of life; and ever since her return from the West Indies, where she resided two or three years, she has never been a month free from this vexatious disease. The climate of England is generally serviceable to people in similar situations, but, unfortunately, it has no beneficial influence upon her.

Of all the diseases of the liver, schirrus is the most to be dreaded, the functions of that organ becoming permanently impeded, and the system cachectic. It is slow in progress, and always accompanied by an obtuse pain under the ribs. The face, if before florid, acquires a dark yellow hue, the appetite diminishes, breathing is performed with difficulty, the bowels become torpid, and the legs swell. "Ubi hepar schirrosum est, sæpe fit sanguinis cursus ex naribus, gingivis, et umbilico; vomitus etiam sanguinis est, et alvus reddit cruenta*." Other affections of the liver, excepting those of a scrophulous description, are generally temporary, and yield as the natural channels are restored. The constitution also improves in the intervals; but in the schirrous liver there is seldom any amendment. It gets worse by degrees, and is at last perceptible to the touch†. "Hi paucis mensibus moriuntur, illi annos aliquot supersunt; plerique paulo ante mortem fiunt hydropici."

Mercury is the only remedy which can cope with this disease;

* Heberden de Historia et Curatione Morborum.
† Ibidem.

case; and to every other medicine, in short, it seems to bid defiance. Some practitioners depend upon internal doses, but for my own part, I would rather at once have recourse to friction. Leeches may be first proper; and if there was much pain, I should certainly wait, till, by topical bleedings and general evacuations, I had abated the violent action, and thereby rendered the exhibition of mercury perfectly safe. Ten or twelve leeches might be applied two or three times before the ointment was used. If the patient's strength would admit of it, neither the cupping-glass nor leeches should be spared.

The skin being generally hot, and the pulse accelerated, nitre, sal. polychrest, antimonials, and gentle aperients may be prescribed with the greatest advantage. If the case be complicated with a lodgment of water in any of the cavities, elaterium, cream of tartar, and mercurial purges must not be omitted, though in such an advanced stage of the disease there is but little chance of restoring health! No harm can result from an early use of mercury; for should it not prove to be the identical complaint under consideration, the system would in all probability derive benefit from the action of so discutient a medicine; but if, on the contrary, the most irremediable ills will occur if the administration of it be long protracted.

A gentleman who was in the West Indies caught the yellow fever, and has since had a schirrous liver. He took a variety of medicines, and amongst others calomel and cicuta, which always gave him relief to a certain degree. In hopes of regaining his usual health from the air of England, and a temperate mode of living, he waited that event for several months with great patience and resignation; but being disappointed in his wishes, at the end of so long a period, he resolved, without farther delay, to enter upon a regular course of medicine. He was under the action of mercury three or four months, during which time an evident amendment took place. Sometimes a drachm of the ung. hydrarg. fort. with camphor was rubbed into the side every night, then half a drachm, and so on, taking care neither to overload nor relax the constitution too much by so free an exhibition of it. I should have mentioned that leeches were applied two or three times, and ten grains of nitre given every four hours. Soluble tartar and castor oil were used as occasional aperients.

This gentleman, to all appearance, got perfectly well in about four months, and by living abstemiously in a pleasant part of the country, and taking regular exercise, has, to the present day, escaped a return of the complaint. As his chief study is the recovery of health, and his circumstances very easy, I have no doubt of this plan effecting a complete restoration.

"Beatus

> "Beatus ille, qui procul negotiis,
> Ut prisca gens mortalium,
> Paterna rura bobus exercet suis
> Solutus omni fœnore."— Hor.

Tubercles are supposed to be peculiar to hard drinkers, and although slow in growth, acquire considerable magnitude.* In scrophulous subjects also, indurations of a remarkable size have been frequently found. The only criterion by which this affection may be distinguished, is the prevalence of strumous action at the same time in some other part of the constitution, or the vestiges of its former influence. Pain in the side and cachexy are common accompanyments. Mercury affords *trifling relief* in the latter disease, but seldom, I believe, does more: It is, however, the only remedy which holds out a prospect of success; and although the complaint may be incurable, you may have the good fortune, by an occasional use of this valuable medicine, to render it stationary, and thereby enjoy the satisfaction of having prolonged life.†

I avoid saying any thing upon hepatitis, as mercury, from its stimulating property, can neither be a safe nor adviseable medicine in the cure of it.

August, 9, 1802.

To the Editors of the Medical and Physical Journal.

Gentlemen,

I BEG leave to offer the following hints to the perusal of your numerous readers; the most of whom, I flatter myself, will coincide in opinion with me.

Some of your Correspondents have wrote very ably against Quackery, both domestic and public, which does them honour; and it behoves every medical practitioner to take a part, in endeavouring to suppress so great an evil.

Most of the above worthy characters have aimed chiefly at annihilating the public notorious advertising quacks, who are certainly

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* I have been present at the opening of bodies wherein I have seen six or seven tubercles in the same liver. In a middle aged man, three tubercles of the size of a small apple were taken out, which, when dissected, had a firm and striated texture. In another subject, a remarkably large one was removed, of a much softer consistence; and upon the anterior edge of the same liver I discovered three or four more small tumours.

† A morbid thickening and hardness of the liver is always relieved by mercury.

certainly a great disgrace to this nation; and the ruin of many thousand of our fellow subjects; but while they are encouraged by those who style themselves regulars, (as I will point out hereafter) and the revenue receives a source of wealth, I fear little is to be expected towards the total subduing the same.

But there exists another evil which falls little short of quackery, and which is mentioned in the third volume of your valuable miscellany, by Mr. Urwins, where he says as follows:

"There is a class of individuals, which form a large part of the medical practitioners of this country, who, without education, without abilities, nay, sometimes even destitute of common sense, having perhaps for a few years been in the habit of compounding and vending medicines in the shop of a druggist or an apothecary, have the effrontery to deem themselves qualified to practise physic, and enrol themselves in the list of medical professors!"

It may be said their number can be but few, but there is too much reason to join in the sentiments of the above writer; and for this reason: Able assistants are hard to be obtained, as a variety of ways render them more independent and comfortable than the salary generally given for their services, and the confinement they are subjected to; the consequence is, many practitioners will take an apprentice, perhaps one who has acted in the capacity of an errand boy, if somewhat active, or one almost as inferior; of course, without fee or reward, instruct him in as much as is just requisite to serve in the situation of a better, by which he is rendered very dependent for a few years, till he begins to think himself so far enlightened, as to undertake the care of the health of others, for a voyage or two to Greenland; or else, through interest, gets into a situation in one of the Royal Hospitals, as dispenser, by which a little money is got together, with a view of attending a few lectures. Having so done, he thinks himself perfectly qualified to commence his career of practice in the world, where perhaps he is prosperous (not from true knowledge, but chance), others take it as an example, and follow it. Some again, though placed out with adequate means for pursuing studies sufficient to inform the mind for so great an undertaking, neglect it almost totally, and think, that the obtaining a few certificates from the hands of their teachers, who are men of eminence, will be a sufficient sanction for their success; but how much they are deceived, for as real merit cannot afford them the necessary assistance to get forward in life, their sole object is not the welfare of their fellow creature, who seeks, and supposes he is obtaining help in his infirmities under the hands of his apothecary: No, the latter is considering himself,

himſelf, by ſending plenty of medicine (if it can be called ſo, to pay for his attendance; when, let the caſe go how it will, the practitioner is very eaſy about it.

Again, ſorry I am to mention it, there is a great want of an open, liberal opinion of, and conduct towards, each other as medical men; ſome, from a narrowneſs of principle, others from envy at their better's ſucceſs, are ever ready to embrace an opportunity of injuring them in their profeſſional avocations; inſtead of acting with that candour and generoſity towards each other, as become men in ſo honourable and dignified a profeſſion; whereby they not only would be eſteemed in the public favour, but render each other reciprocal pleaſure and happineſs.

Great complaint was ſome time ago raiſed againſt the chemiſts of this metropolis, interfering with the buſineſs of the apothecary; ſuch as making up phyſicians preſcriptions, and giving advice to patients, both which I think of very little conſequence; for as to the former, for the moſt part, they were merely retailed as other drugs, and conſequently ſhould imagine it ſcarce worth an apothecary's while, if in good medical practice, as it muſt interfere very much with ſuch practice; another thing, it could not recompence him according to the trouble which would be expected from him, ſuch as viſiting the patients, perhaps upon the moſt trivial circumſtance that might ariſe from the action of the medicine: Now the druggiſt is not liable to the above, it not being his cuſtom; therefore, the preſcriber is only informed of it, and that without any additional trouble to him.

In reſpect to the latter, few, I believe, are capable of giving that advice to patients, as to be an object worthy of notice, by keeping them from the regular practitioner in medicine; and may not the above practice have ariſen from many apothecaries vending drugs by retail, and ſo far interfering with the buſineſs of the chemiſt? Here it is that Quackery is, in a great meaſure, aſſiſted by apothecaries in retailing quack medicines; for may it not appear to the purchaſers that they are approved of by the vendors; this I am ſure of, that they have recommended them when aſked their opinion of ſuch and ſuch medicines; conſequently, Quackery is ſanctioned by thoſe who ought to be the chief opponents to ſo evil a practice.

There are many medical publications, however, well intended by the authors; ſome few have contributed, in no ſmall degree, to the encouragement of domeſtic Quackery; for the natural curioſity of the human mind is ſuch, that it is ever ſearching after novelty, and theſe books being eaſily purchaſed, every thing appears plain therein; therefore, not the moſt trivial

vial complaint supervenes, but a remedy is sought after, without regard to age, sex, or condition of the patient; the practice is pursued, till imaginary disease is rendered real, and life is made miserable for a longer or shorter period.

Having pointed out some of the evils, on the subject of Quackery, in both points of view, its remedy, in my humble opinion, is clearly pointed out in the practice of a contrary plan to the above-mentioned; but the most effectual towards raising the medical profession to the respectability it so justly deserves, and stamp honor on the practitioners, and at the same time afford no room to the ignorant, would be, by the Legislature investing a certain class of members of the Company of Apothecaries, (either by charter, or in any way its wisdom may seem fit, similar to the Royal College of Surgeons,) with a power to examine the fitness of all in future, to practice the science of Pharmacy; whereby, only those who have it in their power, would place their sons in the profession, and who could afford the necessary means to enable them to study, in order to undergo such examination.

At the same time, it might appear proper, to obtain of the Legislature, some act, or power, towards suppressing a class of men, who practice so largely in duping the unwary public, (by the bye, many of them do not come under the cognizance of the new act so strongly against quack medicines) who have the misfortune to fall the victims of a dire disease, and one which requires all the strength of understanding and judgment, to render less destructive to the human race, viz. syphilis, than to be suffered to be the means of living for the idle and ignorant, at the expense of lives and property of whole families; for as character is no object to them, so the greater deception, by promising more than possible is their greatest art; for what can be thought of a painter and glazier turning quack doctor, and others equally absurd, only by changing their name and place of abode?

For fear of obtruding too much on your goodness, and taking up too much room in your valuable publication, I will close the subject, by sincerely hoping, that some of your much abler Correspondents will continue the subject; and that their efforts may be crowned with all the success it so much merits, is the firm wish of one, who is happy in subscribing himself

A MEDICAL PRACTITIONER.

August 9, 1802.

Observations

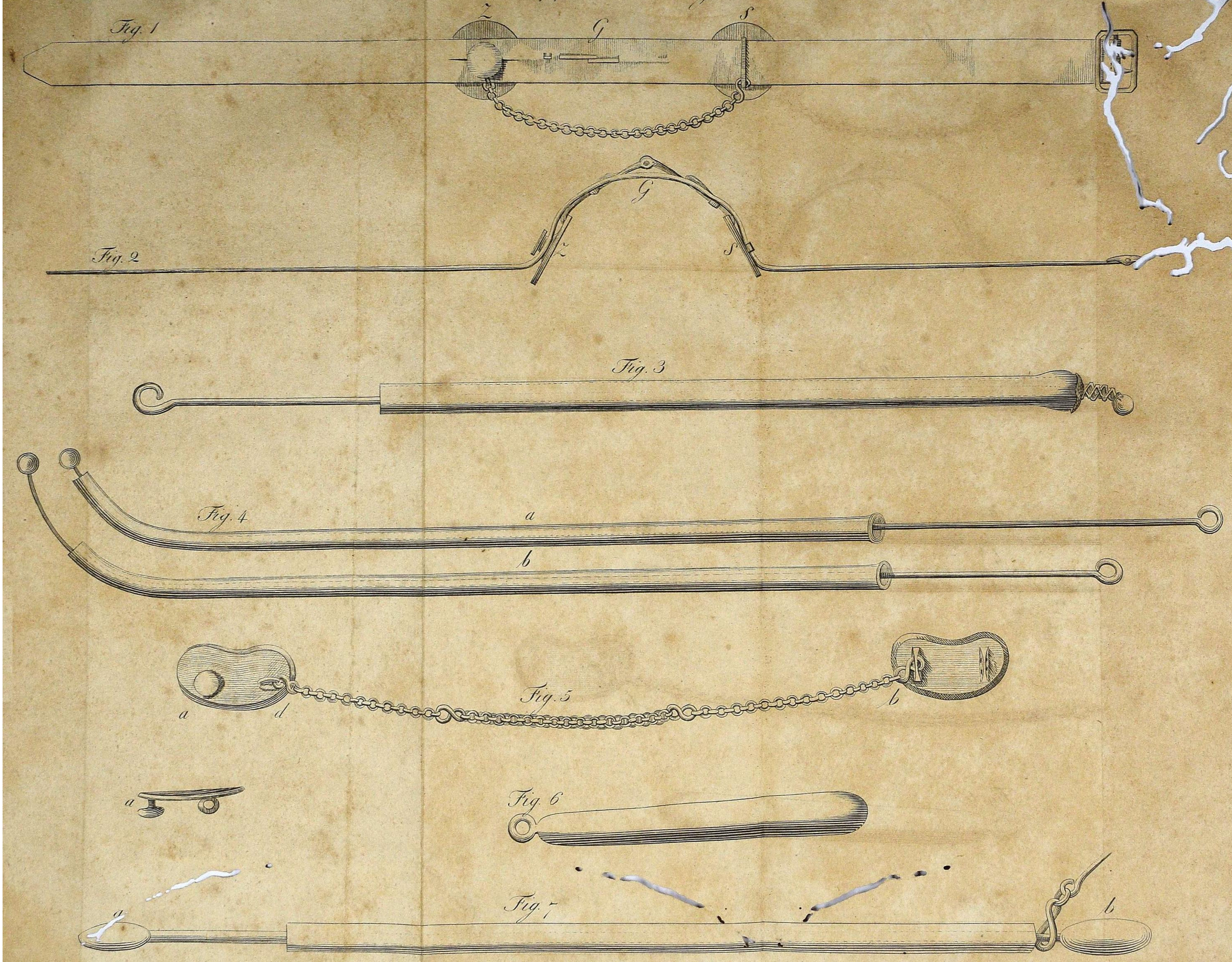
Obſervations and Experiments, made with the view of employing Galvaniſm for the Cure of certain Diseases; by Dr. GRAPENGIESSER, *of Berlin.* *

[With two Plates.]

IT is ſeveral years ſince I firſt conceived the idea of employing Galvaniſm in diſeaſes, having at that time a frequent opportunity of obſerving the remarkable effects of the Galvanic ſtimulus on the nervous ſyſtem, as I aſſiſted at the Galvanic experiments of my friend Mr. Humboldt. I ſince employed the ſimple Galvaniſm, or the experiment of Mr. Hunter, (which conſiſts in touching the different branches of the ramus ſecundus paris quinti in the mouth, on the upper jaw, the infraorbitalis and alveolaris, with a piece of zinc and ſilver, the ends of which are alternately joined and ſeparated) as a proof for the degree of excitability of the optic nerve. The appearance of light, however, was frequently not perceived, notwithſtanding there was a ſufficient degree of excitability left in the nerve, and even in the eyes, that were quite ſound; and though I had often recommended the experiment in weakneſs of ſight, I never ſaw any great ſucceſs. In November 1800, a caſe occurred to me, which afforded the *first opportunity of employing the simple Galvanism for the cure of a disease.* A young lady, eighteen years of age, of a lean habit, and pretty tall, had been affected for about four years with a hoarſeneſs, which ſometimes rendered her quite ſpeechleſs, or brought on a perfect aphonia. Having uſed the moſt efficacious remedies, as mercurials, cicuta, belladonna, &c. without effect, ſhe applied to me for advice. I propoſed to lay a bliſter round the neck, which, however, produced no change in the diſeaſe, notwithſtanding its being kept in ſuppuration for ſeveral days. I now thought to increaſe the effect of the bliſter by a Galvanic experiment; and having accordingly placed on each ſide of the larynx, a bliſter of the ſize of a ſhilling, I covered the excoriated ſpots on one ſide with a zinc plate, to which a wire of the ſame metal was faſtened, and on the other ſide with a ſilver ſpatula. As ſoon as I brought

* From his work, entitled, " *Verſuche den Galvanismus zur Heilung einiger Krankheiten anzuwenden, Angestellt und Beschrieben von* C. J. C. Grapengieſſer, M. D. *mitz Kupjertfelan, Berlin,* 1801, *for Milius.*" This work being at preſent the beſt publication that has appeared on the medical uſe of Galvaniſm, we beg leave to communicate its intereſting contents more fully than a mere extract would have allowed, for which the novelty and intereſt of the ſubject will, we hope, make a ſufficient apology.

Medical Applications of Galvanism.



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brought the two metals in contact with each other, a burning ſenſation at thoſe ſpots aroſe, and the larynx heaved up and down convulſively with loud ſobs or ſingultus, which were very much increaſed whenever I effected the combination of the above metals by means of a gold wire. On alternately applying and removing the wire, the convulſive motions of the larynx became ſo violent as almoſt to be inſupportable to the patient; whereas, when the three metals were in continual contact with each other, the contractions of the muſcles were moderate, and the ſenſation leſs troubleſome. After I had continued this experiment for about a quarter of an hour, a watery humour began to run from the excoriated ſurfaces, which, however, proved not ſo ſharp as had been obſerved on ſimilar experiments of Mr. Humboldt. The experiment being diſcontinued, I dreſſed the wounds, after which the convulſive heaving of the larynx by no means ceaſed, but recurred from time to time till the evening, on which account I was obliged to preſcribe an opiate, as the family of this lady began to be anxious about her. The patient brought up a great deal of pituitous matter, and two hours after ſhe began to ſpeak louder and clearer than ſhe had hitherto been able to do. This having continued the next day, when the ſpaſtick contractions of the larynx had entirely ceaſed, the ſpeech was loſt again after the fourth and fifth day. Encouraged, however, by thoſe favourable appearances, I determined to repeat the experiment once more, and for a longer time; for which purpoſe I procured two metallic plates, one of zinc and the other of ſilver, which I faſtened to a ſtrap of leather, in ſuch a manner that I could move one of the plates in order to bring them more conveniently in contact with each other by means of a ſmall pair of golden pincers, to which end the zinc plate has a button, which is faſtened in a hole of the ſtrap; the ſilver plate, however, is furniſhed with a loop ſo that it can be moved. The pincers may alſo be faſtened by ſmall holes in the ſtrap. In order to combine theſe two plates more cloſely, I frequently place between them a ſmall golden chain, See Tab. I. fig. 1, 2. After having again applied two ſmall bliſters on each ſide of the larynx, I faſtened the ſtrap round the neck, that the plates might exactly lie on the excoriated ſpots, and when I brought them in contact by means of the gold pincers, the ſame phenomena appeared as were obſerved in the firſt experiment; they were, however, more intenſe than before, which might be owing to the cloſe connexion of the metals produced by this apparatus. Every five, eight, or ten minutes, a convulſive riſing of the larynx came on, attended with a difficulty of deglutition; a great quantity of watery humours iſſued from the

the ſurfaces of the wounds, and a great deal of pituitous matter was brought up, whereby the voice became inſtantly clearer. On the evening of the ſame day, the patient could ſpeak perfectly loud, though the quantity of mucus in the throat prevented her from ſpeaking diſtinctly. The apparatus not being any longer troubleſome to her, I did not remove it that night, and though the convulſive heaving of the larynx had from time to time recurred, ſhe enjoyed ſome reſt during the night. The next morning the wounds were healed; and on having removed the apparatus the patient could ſpeak pretty loud, though the mucus made the ſpeech leſs clear. In order to remove this obſtacle I preſcribed an expectorant, and the next day an emetic, which having ſufficiently operated, the voice of the patient was as diſtinct and loud as it had ever been before*. The ſucceſs of this experiment, which I may venture to ſay was the firſt undertaken with the ſerious view of curing a diſeaſe, had naturally entitled me to entertain the higheſt expectations from this remedy. I began to think, how it might be employed in other diſeaſes, iſchiatic, white ſwelling, &c. in which I had already made ſeveral ſucceſsful experiments, when I became acquainted with the diſcovery of Volta's pile. A new field of inquiries and experiments opened itſelf, and not a trifling advantage was to be expected from an apparatus, whoſe efficacy could be leſſened or increaſed, and adapted to the incitability of every ſubject.

Sect. 2. *Some remarks on Volta's pile and its poles.*—Suppoſing

* In this favourable ſtate ſhe remained for about ſix months, during which time ſhe had once a cold and ſore throat, without ſuffering any change in her voice, when ſhe loſt it on a ſudden. This diſagreeable circumſtance ſeems to be owing to her having expoſed herſelf to frequent colds and drafts of air, and ſhe was beſides very paſſionate; at leaſt, I could not diſcover any other cauſe. I tried to produce commotions of the organs of ſpeech by means of Volta's pile. To this end I applied two conductors, as fig. 7, Tab. 1, to each ſide of the larynx, which were faſtened to the two poles of the battery; but though it cauſed the ſame phenomena as in the above experiment, it produced no effect upon the complaint. I again applied the bliſters and the collar, which, at this time, however, had no effect, moſt probably on account of the incitability being exhauſted by the ſtronger effect of the battery. I determined, therefore, to wait till it was again ſufficiently accumulated, during which time I gave pills of *gu ammon. aſafetid.* Sapo Starkeyan, extr. Arnicæ, *Kermes miner. and ſquill*, and a bliſter in the neck was kept open. A fortnight after I began to apply the bliſter and the collar, which produced the uſual effect, though in a leſs degree, and ſeveral hours after the voice was reſtored, but the next morning it again entirely diſappeared. I ſhall hereafter give a farther account of this caſe, as I purpoſe to employ the Galvaniſm once more at a proper time, after having made the patient undergo a preparative treatment.

posing that the greatest part of our Readers is sufficiently acquainted with the construction of the Galvanic apparatus of Signor Volta, I shall only subjoin a few remarks.—According to my observations, a pile constructed of silver and zinc, acts equally strong as one of gold and zinc, the strength of which, however, is superior to that of a pile of copper and zinc. Having received about a hundred plates of Frederics d'or, not yet struck from the mint at Berlin, I got made an equal number of silver plates; but the piles I constructed with them showed no remarkable difference in their effects; however, I do not deny that some difference may be perceived by means of the Galvanometers proposed by Messrs. Robertson and Simon. For the medical application of Galvanism I am inclined to allow the preference to the copper-plates, on account of the greater uniformity with which they seem to act. The Naturalists of Berlin have agreed, in case the zinc is placed beneath the disc of wet cloth or pasteboard, and the silver above it, to call the undermost end the zinc-side or the zinc-pole, and the uppermost, the silver-side or silver-pole. Mr. Ritter arranged the plates in the following order (beginning from below): Silver, cloth, zinc, silver, cloth, zinc, and so forth. The undermost plates of silver, however, are of no use at all, as it is more than probable, that the action of the two heterogeneous metals merely arises from a process of oxydation; hence a pile constructed of metallic plates only, without any moist body between them, would have no effect at all. If zinc, therefore, is placed beneath the moist intermediate body, and the silver above, the lower end is the zinc-pole, and the upper extremity the silver-pole; the former shews negative and the latter positive electricity. On the decomposition of water, the zinc-pole produces hydrogen, and the latter oxygen gas; the former acts with greater force and more penetrating than the latter: The former occasions an alkaline, and the latter a sourish taste; and the former produces in the eyes a reddish light, the latter a bluish. I place beneath the undermost zinc-plate another of the same metal, which at one side projects beyond the former, as seen in T. II. fig. 3,* and a similar silver or copper plate I put on the uppermost silver or copper-plate of the battery. These two plates I call conducting-plates, and they have the advantage, that by placing the uppermost of them between the plates of the pile, lower down or farther up, I am enabled to use for my experiments any number of strata, without in the least deranging the pile, and thus diminish or increase the strength of the

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* This Plate will be given in our next Number.

the battery according to the different purpofes that may be intended. Any other conftruction of the Galvanic battery, which does not allow the removing and adding of ftrata, according to the different intentions, is not well calculated for medical ufe; for inftance, the conftruction of Volta's pile, propofed by Mr. Cruikfhank, (Nicholfon's Journal for Natural Philofophy, Vol. iv. p. 258) by cementing the plates and faftening them in a kind of trough, with intermediate cells, filled with a folution of falt or fal ammonia.

The Galvanic battery is by degrees deprived of its power,

1. When the difcs of cloth or pafteboard are dry, either by the evaporation or decompofition of the fluidity.

2. When all the plates are oxydated at the furfaces towards the difcs. In this cafe the pile muft be taken down, and the plates freed from the oxydation by a file or by rubbing them with fand, falt and vinegar, or very diluted fulphuric acid.

I alfo beg leave to point out fome other advantages in the management of the apparatus.

1. As foon as the battery begins to lofe its power, the firft method of renewing its action, is to fhake the chains in different directions, or, what is ftill better, to remove them from each other, and to ftretch them very tight, which is to be done with dry hands. The power of the battery will be alfo renewed by placing the conducting-plates between fome of the plates of which the pile is conftructed.

2. Not the leaft oxyd ought to be fuffered in the holes of the conducting-plates, or in the links of the chains, as this will prevent its being properly conducted.

3. Of all fubftances that kind of cloth called Karfimir is beft calculated for retaining the moifture, becaufe common cloth becomes ftiff and hard, and pafteboard is not fufficiently durable.

There is, however, a ftate of deafnefs originating from debility with increafed excitability, in which I have never experienced any great fuccefs from the application of Galvanifm. Patients of this kind hear lefs diftinctly when there is much noife and the found ftrong, as from a hearing trumpet; but in order that they may underftand what is faid, it is neceffary to fpeak gently and diftinctly clofe to the ear; they hear better in moift weather, and after good reft. In deafnefs arifing from an accumulation of blood in the veffels of the head, and more efpecially of the organ of hearing, the application of Galvanifm is extremely hurtful; and it is likewife of no effect, where retrograde exanthemata, gout, or rheumatifm have occafioned the deafnefs, particularly when thefe caufes continue to act; but if the difeafe fhould remain after they have been removed, the application

application of Galvanism is properly indicated. The accurate diagnosis of these different species of deafness is often subject to many difficulties, as it sometimes happens that two or three of the above causes may take place at once, or one supervene to the other, and thus render the state of the disease more complicated. Deafness and difficulty of hearing produced by a deficiency of any of the auditory organs, by external lesion, commotions of the brain, relaxation of the membrana tympani, &c. are not properly calculated for the application of the Galvanic stimulus. Something remains to be said of the tinkling of the ears (susurrus aurium), a symptom which frequently attends deafness, and is generally thought to throw light on the nature of some species of this complaint; but from my experiments I am induced to contradict this opinion. The tinkling of the ears is either, 1, A particular symptom, which, without having the least influence on hearing, forms a peculiar complaint; or, 2. It arises from the same cause with deafness, and consequently is a symptoma causae, but never a symptoma morbi, or pathagnomonicum.

In the *first* case it is often of short duration, and is produced by causes sometimes inexplicable; or in plethoric persons, from congestions of blood towards the head, &c. but in other cases it is occasioned by some changes in the auditory organs themselves, viz. a topical debility of the auditory organ, which is generally attended by a congestio sanguinis passiva; an exanthematous eruption in the ear, &c. A difficulty of hearing, however, frequently attends these complaints, though not in every case. The tinkling of the ears also supervenes to some species of fevers, particularly to the typhus, and it is not unfrequently met with in cases of apoplexy.

In the *last* case (2) it is generally concomitant with deafness, without being, however, a constant symptom of every species of this complaint, as it is sometimes not observed in the most perfect deafness.

The manner in which Galvanism acts on that curious symptom, may serve us as an indication, whether it is properly employed or not. If, for instance, 1, *In the deafness without susurrus aurium*, this symptom comes on during the application of Galvanism, and ceases as soon as the Galvanism is discontinued, we may consider it as a good sign and promising success; but if the singing in the ears proceeding from the application of Galvanism should continue for some time after, the case is not so favourable, though it still admits the application of Galvanism: If, however, that symptom becomes too violent, with increased deafness, Galvanism is not at all indicated.

2. *In the deafness attended with susurrus aurium.*—If this symptom

ſymptom diſappears during the application of Galvaniſm, we may expect the intended ſucceſs from that ſtimulus; but if it has no influence on the ſuſurrus aurium, or produces another kind of ſounding in the ears, which diſappears on the diſcontinuation of Galvaniſm, the ſucceſs of its application is rather doubtful. If it increaſes the ſinging in the ears, together with the deafneſs, in this caſe Galvaniſm is not fit to be applied. It is ſometimes the caſe, that Galvaniſm proves active on hearing without producing the ſuſurrus aurium or changing it, when it attends deafneſs. The kind of ſound perceived in the ſuſurrus aurium is extremely different, as it ſometimes reſembles the hiſſing noiſe of boiling water, or the ringing of bells, the roaring of a ſtorm, &c.

4. *Paralysis of the Spincter Ani and of the Neck of the urinary Bladder.* I am actually engaged in applying the Galvaniſm of the battery againſt the complaint, by bringing the conductor, Tab. I. fig. 6, joined by means of a chain with the zinc-pole, into the inteſtinum rectum, while a ſmall concave ſilver plate is applied to the glans penis and brought in contact with the other pole. The experiment being tried but a few days ago, I cannot yet judge of the ſucceſs.

5. *Asphyxia, or apparent Death.* Galvaniſm may be uſed with great ſucceſs for the diagnoſis of this phenomenon from real Death, and for reſtoring people to life. Having, however, not as yet had an opportunity of making experiments in that Caſe, I refer my Readers to what Mr. Humboldt has ſtated on the mode of applying the ſimple Galvaniſm in this accident; but it ſeems probable, that the battery would prove more efficacious than ſimple Galvaniſm.

6. *Chronical Hoarseness and Aphonia.* From the ſtatement of my firſt experiment, it appears how uſeful the application of Galvaniſm may prove in this complaint; but as it is ſometimes occaſioned by different cauſes, on which the action of Galvaniſm cannot operate, it is very material to diſtinguiſh them with accuracy, and to aſcertain the caſes in which Galvaniſm is properly indicated. Hoarſeneſs and aphonia from topical deficiences, preternatural formation of the organs of voice, conſtruction of the larynx and trachea, after inflammations and ſuppuration, cannot be removed by Galvaniſm. It is likewiſe of no effect, but rather hurtful, to apply the Galvaniſm in that ſpecies of hoarſeneſs and aphonia, which ariſes from an inflammation of the wind-pipe and larynx, (angina trachealis et laryngia) or from an increaſed ſecretion of mucus in theſe parts, (blenorrhoea) originating from debility with increaſed irritability, or with increaſed excitement.

There

There are only two Cases, in which Galvanism is useful and efficacious, viz. If the disease proceeds,

1. *From indirect Debility and Paralysis of the Nerves of the Voice*; for instance, after a violent inflammation, after violent efforts of these organs by singing, screaming, &c. in this case the Galvanism of the battery is to be applied on the wetted skin, without its being previously excoriated by blisters.

2. *From the Action of a morbid Stimulus*, by which a certain change in the organs of speech is produced, probably an effusion of lymph between the nervous and muscular fibres, which hinders and disturbs the function of those organs. The nature of that stimulus is generally catarrhous, rheumatical, gouty, scrophulous, exanthematous, and venereal, but this is not very material; and if it produces a certain degree of excitment, which Hunter calls adhesive inflammation and a transudation of lymph, we may have recourse to Galvanism. This state partly resembles a scirrhus, partly a dropsy; at least, its transition to either of these affections may easily take place, the lymph not being resorbed in due time. Galvanism, particularly the simple one, applied on wounds occasioned by blisters, is of the greatest service, particularly when the morbific causes have ceased to act. General remedies ought, however, not to be entirely neglected in these cases.

7. *The White Swelling*, and 8. *Struma*, in several cases of which I have applied the Galvinism with some success, though my experiments were not numerous nor lasting enough, to enable me to give a more accurate account of the efficacy of this remedy in those affections.

9. *Some Species of Chronic Rheumatisms, especially the Sciatica*, the nature of which must be asthenic, for admitting the application of Galvanism.

10. I have used it with great success in a topical inflammation, occasioned by a metastasis of variolous matter.—A child, four years of age, of a weak and delicate constitution, was afflicted after the small-pox with a metastasis in the bones of the hip and elbow joint, of which last the child suffered particularly, as it was swoln, red, quite immoveable, and extremely painful. Having applied two small blisters, one above the joint on the inside of the arm, and the other below the joint on the outside, I fastened on the wounds two plates, one of silver, the other of zinc; the first of which was connected by means of a chain with the silver side, and the other with the zinc side of a battery of twelve strata, and the whole apparatus suffered to remain in this state during the night. On its being removed next morning, the swelling was found to have considerably decreased, the pains were greatly diminished, and the child could

move the arm in different directions without much pain. The affection in the hip, however, was as bad as before. Having prescribed calomel, with sulphur auratum antimonii, and a decoction of stipit. dulcamar. and rad. helenii, I applied the apparatus a second time, and though I found it the next morning to be quite deranged, and all the bad symptoms to have returned, I am induced to expect the intended success from the continued use of this method of cure.

Galvanism appears to act: 1. As a generally exciting remedy, which, when applied in diseases of deficient excitement in due time, and in a proper degree, is capable of recruiting life, and restoring such a degree of excitement, as to enable the organs to perform their functions in a proper manner.

2. As a specific exciting remedy, which by its pecular irritation or stimulus, is capable of diminishing and removing morbid stimuli. In this manner those cases may be explained, in which it had such a sudden, but not permanent effect.

3. As a powerful derivans, when applied to wounds caused by blisters.

Sect. 6. Methods of applying Galvanism in Diseases.

1. *In Paralyses of the Extremities.* In these affections I have always employed the Galvanism of the battery in a double manner.

a. Only *on the skin, which must be previously wetted,* by touching with two conductors, (as T. 1. fig. 7.) two different spots of the limb, which are sufficiently provided with nerves; for instance, when the whole arm was to be galvanised, the conductors were applied to the region of the arm-pit, or somewhat lower down, and to the region of the musculus pronator quadratus. When the fore arm was only to be acted upon, Galvanism was conducted to the nervus ulnaris, at the end of the elbow joint, or between the wetted fingers. It is to be remarked here, that the conductor of the zinc side should always be applied above the limb on a nervous trunk, while the conductor of the silver side must touch the part below, because this is the most efficacious manner of application. For the purpose of galvanising the hand, the conductor of the silver side, together with the affected hand, must be immersed in a bowl of water, while the zinc conductor is applied to the nervous branches that run above; the vessel into which the hand is put, ought to be as small as convenient, because the efficacy of the battery will be too much diminished, if the vessel is larger than is requisite. The conductors produce a redness on the wetted skin, and on touching several times the same place with the conductor of the zinc side, a small round hole will appear,

which

which does not bleed, though an eschar forms itself on it by degrees. The heat is likewise increased in the part which is galvanised.

b. On Wounds made by Blisters. In this case we have the double intention,

1. *To produce a strong Irritation* with a small number of strata. The excitability of a paralytic part is often so extremely diminished, that 150 strata are necessary for producing some effect; but if a blister has been applied before on the place, with which the conductor is brought in contact, one-third of the number of strata will be only required.

2. *To occasion a Derivation*; for instance, in paralyses caused by chronic rheumatism, where a transudation of lymphatic humours into the vaginal membranes of the muscles and nerves has taken place. The wounds are, in this case, covered with metallic plates, to which the chains are fastened. A great issue of watery humours, with an increased heat of the diseased part, is generally produced by this mode of applying the Galvanic stimulus.

EXPLANATION OF TABLE I.

Fig. 1. A simple Galvanic chain to be applied on wounds made by a blister. *Z* is the zinc-plate. *S* the silver-plate. *G* the golden pincers, by means of which the two plates are connected. *K* is a golden chain for making the connexion still closer. All is represented in half its natural size.

Fig. 2. The same in profile without the chain.

Fig. 3. A conductor for the meatus auditorius. The handle of the wire, which passes through a glass tube, is covered with silk, leather, or cloth. The crooked end of the wire is screwed on, the opening of the glass tube being too small to let it pass through, which opening is purposely so narrow, that the glass tube may not slip towards the end of the wire.

Fig. 4. A conductor for the tuba Eustachii, agreeing with the former, except the glass tube being a little bent, and the wire having at its extremity a spring, with a small metallic knob. (*b*) the same conductor, with a tube less bent, in natural size.

Fig. 5. A simple Galvanic chain, to be applied behind the ears and on the processus mastoidei. *a.* a reniform somewhat concave silver-plate with a button and a loop. *b*, a similar plate of zinc with a double loop. *c, b*, a gold chain. *d, c*, a silver chain, double at one end, that it may be lengthened. *a*, the silver plate in profile.

Fig. 6. A conductor, made of silver or zinc, for the nose, mouth, and other parts of the body, in natural size.

Fig. 7. A conductor, particularly adapted for the eye. It consists of a strong brass wire that passes through a glass tube, on the two ends of which *a, b*, an oblong metallic knob is screwed

[To be continued.]

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

SHOULD you think the following paper worthy of being inſerted in your extenſive and very uſeful publication, it is at your ſervice.

It contains the caſe of a lady, who being between three and four months advanced in pregnancy, although the membranes broke, and the waters diſcharged, yet ſhe went the full time of geſtation.

Mrs. P——, about forty years of age, of middle ſtature and active diſpoſition, having been ill ſeveral weeks with colds, inflamed glands about the neck and throat, cough, and much loſs of appetite, which had reduced and weakened her greatly. On the 10th day of November 1801, being alarmed in the evening by the falling of an iron bar belonging to a window cloſe under where ſhe was in bed, was ſeized with ſuch violent ſpaſmodic efforts, as to occaſion the rupture of the membranes ſurrounding the child. The next morning, being deſired to attend, I was informed there had been a diſcharge of waters, accompanied with pain. On examining, the os internum appeared cloſed, but deſcended; and the os externum ſomewhat relaxed.

November 17th. This being the eighth day, the diſcharge and pains continued, but with ſhort intermiſſion, until the laſt twenty-four hours, having been free from both during that time; ſince which, the waters have diſcharged in much ſmaller quantities, and the motion of the child is almoſt imperceptible. Since the rupture of the membranes, the diſcharge of waters was ſo copious, as for ſeveral times to run through ſixteen folds of blankets and the bed, to the floor; by which the patient became ſo much reduced in ſize, as not to appear in a ſtate of pregnancy; although, before the accident, ſhe ſeemed much larger than uſual at that ſtage of geſtation. Being importuned yeſterday, November 16th, to eat a bit of boiled haddock, it ſo diſordered her ſtomach and whole frame, as nearly to have proved fatal. This obſervation is only to ſhow, with what caution even light ſolids, and in ſmall quantities, ſhould be allowed, when there is a general debility with indiſpoſition; even ſhould there be an inclination to food without the power to digeſt it.

Nov. 20th. The eleventh day, I examined again, and perceived the os uteri to be lower down, nearly touching the os externum,

externum, but not open or ſoft; the pains returning frequently, attended with a diſcharge of waters and a bearing down at times ſtill, as if the womb was forcing from her, (as ſhe expreſſed). Being now exceedingly languid, ſhe was under the neceſſity of taking frequently wine and water, broth, beef tea, &c. to ſupport nature; and yet ſhe was with ſome difficulty kept from fainting.

My patient and her friends now were much alarmed, and begged of me to relieve her from her deplorable ſtate, by aſſiſting the delivery of the child, which they concluded was neceſſary to ſave the mother's life, and the ſooner the better. My reply was, that I could not be juſtifyed in haſtening the delivery; in ſo doing the child would be deſtroyed, and I could not anſwer for the mother in her preſent ſtate of health. I encouraged her by every means to have patience; and I aſſured her all would terminate favourably in due time. Previous to her fright, ſhe had been taking balſamic anodyne medicines, and uſing gargles; as the mucus diſcharged from the glands about the throat was uncommonly viſcid, and adhered ſo much to the œſophagus and epiglottis, that ſhe was under the greateſt apprehenſions of being ſuffocated. The pulſe during her long indiſpoſition, has indicated but little fever. (The opium, &c. were ſtill continued.)

21ſt. The os externum was more lax; the os uteri continued cloſed, and not ſoft; the motion of the child was perceived.

22d. Had a better night; more ſleep, but frequent pains; and the waters continued diſcharging. The child now appeared to the mother to become more languid.

23d. She had a pretty good night; leſs pain, and was able to ſit up; her pulſe is good, and her cough better.

25th. She had a tolerable night, but the pains and bearing down increaſed, occaſioned by ſome ſurpriſe; ſhe was out of bed, and rather cheerful.

27th. She had again a reſtleſs night, much pain and bearing down; ſo violent, that the expulſion of the fœtus was expected every moment, but no waters were diſcharged. The child again appeared weaker, its motion a ſort of fluttering. She is much better in health, takes light nouriſhment, and is out of bed ſome hours in the day.

28th. Had a better night; more ſleep, leſs pain; ſome diſcharge, reſembling the whites.

30th. Again had a very reſtleſs night; and pains, accompanied with a diſcharge of waters, thicker in conſiſtence at times. On examining, I found the os internum ſoft, and a little open, but not enough to introduce the point of a finger; the neck of the uterus ſeemed diſtended quite to the mouth,

and its contents resting close over it. The os externum continues very lax.

December 1st. She slept better; the pains are moderate.

3d. There was a more copious discharge of waters in the night, attended with forcing pains; yet she slept more, but felt herself this morning very weak and low. She perceives the motion of the child to be stronger, pressing upwards against the stomach, which in some degree affects her respiration, and makes her appear to herself as if she was fuller and enlarged. Eleven o'clock at night I examined again, and found the os internum much higher, closed, not soft, and the uterus contracted. She has been out of bed more to day than usual; the pains trifling, but the waters were constantly draining off.

5th. The waters continued discharging; the child was perceived stronger, and much agitated; sometimes it seemed to her pressing against the stomach; at others to be forcing downwards, but the pains moderate.

6th. An exceedingly restless night; discharge of waters, with bearing down pains.

7th. No sleep all night; bearing down pains, the waters discharging at the same time rather thicker, and of a brown yellow colour; the child is perceived to move at times.

8th. By taking more opium last night, she slept better; but the discharge as usual.

9th. This morning the child was perceived lower down; its motions less; the discharge thicker, but not so much of the yellow cast. Eleven o'clock at night, has been out of bed the greatest part of the day; the pains this day have been but few and moderate, without any bearing down. The child continues to be low down, and weighty; its motion but little, and the discharge less; her health and spirits, upon the whole, better.

11th. Continues much better in health; up the greatest part of the day; very little discharge, and that not very thin. The child moved but seldom, but it then gave pain, and at times a bearing down, as if something had been coming away.

12th. She was able to walk about the room; felt much stronger; the child moved but seldom. Had in the course of the day two or three violent pains in the back like cramp, (supposed to have taken cold); the discharge not much, but thicker, and of a brown yellow cast.

13th. The violent pains in the back were this day somewhat abated; and the child moved very gently (with a kind of fluttering motion); the discharge yellowish.

14th. She had a restless night; some waters discharged with pains; the child moved stronger, and occasioned much pain at the

the time with a bearing down. Omitted the opiate the two preceding nights; repeated it again this morning.

15th. A much better night; was cheerful, and appeared pretty well, fitting up; fome waters pafs with a thickifh difcharge at times; fhe felt the child ftronger.

16th. A very difturbed night; pains and bearing-down; fuppofed two or three quarts of waters, with a thickifh difcharge, came off in the courfe of the night; and fince the membranes were firft ruptured, it is calculated there could not have been lefs than five or fix gallons of waters difcharged. They got vent chiefly in the night, when in an horizontal pofition: The child, coming in clofer contact with the uterus, gave greater pain by its ftruggles, and occafioned the uterus to contract, confequently difcharged the waters; or the rupture in the membranes may be high up, fo that the waters could not fo eafily get vent in a perpendicular pofition. There has not been any appearance of blood.

17th. A better night; no waters; but the thick, yellowifh difcharge in a very fmall quantity. The child was in frequent motion, but weak, and feemed to the mother low down; now and then fharp pains in the back. For fome days complained of great coldnefs in the external part of the abdomen, about the navel, which cannot be removed by hot flannels, &c. This moft likely proceeds from cold taken; which, no doubt, was the caufe of the violent cramp-like pains in the back on the 12th and 13th (the weather being intenfely cold.)

21ft. No difcharge of waters; but the yellow, thickifh difcharge continues, with pain in the back and womb frequently.

24th. The motion of the child is gentle; yet caufes pain in the womb. Having a better appetite, fhe recovered ftrength, walked about the houfe, and was cheerful; yet felt, at times, as if fhe was going to be delivered.—(Opium repeated, p. r. n.)

29th. She continued getting much better in health, and feemed ftronger than fhe had been for fome time; ate as in common with the reft of the family; flept better, and looked better in her face. The motion of the child ftill gives pain. It feems to rub or grate againft the womb (fo fhe expreffed herfelf). The yellowifh difcharge continued; fhe appeared to herfelf fometimes very big, at others quite fmall. This may be occafioned by the child being higher or lower. The cold complained of in the belly has left her.

31ft. In good fpirits; but in confequence of a fire a few doors off, the preceding day, fhe had an hyfteric fit; yet no ill effects followed. The difcharge as ufual, thickifh and yellow; frequently felt the child, but only in a kind of flut-

tering motion, very different (ſhe obſerved) from what ſhe uſed to feel in her former pregnancies, when the waters had not been diſcharged.

1802.—Jan. 12th. Continues in pretty good health, excepting ſlight colds affecting the head, face, and throat; her appetite was better than it had been for ſome time. The yellowiſh diſcharge as uſual; the child's motion weak, giving but little pain.

18th. The child is ſtronger, and gives more pain; the diſcharge as before, excepting ſome few red ſpots, which ſhe obſerved this morning. She appeared again much bigger, and felt ſo to herſelf.

Feb. 6th. In good health; walked about in the air, and rode in a coach, but complained of much pain when the child moved: The diſcharge now is much thicker, but yellowiſh.

25th. Her health good; the child ſeemed to pant, ſtruggle, and gave much pain when ſhe walked or ſtood, ſo as to be fatigued.

March 6th. Had a fall the other day, ſince which there has been conſiderable diſcharge of waters, and the motion of the child has been more painful.

16th. An alarm yeſterday from the cry of fire, occaſioned ſickneſs, tremblings, and great pain many hours, as if in labour, with conſiderable watery diſcharge, and the child ſeemed to her to pitch very low.

18th. Tolerably eaſy; felt the child move again, and raiſed up, preſſing againſt the ſtomach.

25th. For ſeveral nights paſt pains came on like labour, about one o'clock, and continued the greateſt part of the night, attended with the yellow watery diſcharge. She has taken cold, and complains of ſore throat, &c.

April 12th. Pains continue, with ſome diſcharge as uſual. The pains in the back, no doubt, are rheumatic.

19th. Frequent grinding pains in the back.

20th. Taken laſt night, about eleven o'clock, with ſharp pains, which have continued more regular, and attended this morning with a diſcharge of mucus. Theſe pains increaſed till between ſeven and eight o'clock in the evening; at which time ſhe was delivered of a ſtrong, healthy, full-grown male child; the head preſented; the membranes preceded, and protruded quite to the os externum, when they ruptured with a pain; about the quantity of a tea cup full of water diſcharged; the head immediately followed, and with a little aſſiſtance the child was delivered.

21ſt. I was informed by the nurſe there appeared to be about the uſual quantity of diſcharge when put to bed, as in her former labours,

labours. On examining the placenta and membranes, I could not discover any other aperture in the membranes but that through which the child passed, in the most depending part, directly opposite to the placenta. In no one labour before had she so good a time in getting about; she was able to sit up the second day; and at the end of the tenth day walked about the room. She suckles the child, and has great plenty of milk.

I believe it is not common, at so early a state of gestation, as between the third and fourth months, for pregnancy to proceed long after a rupture of the membranes. In this case there being an unusual quantity of the waters so early, there can be no doubt they must have accumulated from time to time. It seems also certain, that the adhesion of the placenta to the uterus must have been uncommonly firm, and the make and texture of the child singularly compact; but that it should have survived the almost constantly repeated contraction of the uterus for so long a time, one cannot easily comprehend. The yellowish discharge might be occasioned by the contents of the child's bowels being pressed out from time to time by the violent contraction of the uterus, and so tinging the waters, &c. I examined the state of the uterus, &c. very seldom, and then as gently as possible, well knowing the less this is done under such circumstances the better: Indeed, it is seldom any manual assistance can be given early in pregnancy, even in cases attended with floodings. Nature alone generally expels the contents of the uterus in abortions. The opium administered in small quantities, and frequent, no doubt, assisted greatly in quieting the pains and action of the uterus. Indeed, without it I do not conceive the life of the child could have been preserved. It may not be improper to remark, that the patient increased in size latterly, so as to be, at the end of the ninth month, about the same bulk as in her former pregnancies. She always quickened very early, (i. e.) about the beginning of the third month. The child is now in good health, and thrives much I am, &c.

Berner's Street, Aug. 18, 1802. JAMES HOGBEN.

TO DR. BRADLEY.

SIR,

THE last Number of your Journal, has, I am persuaded, afforded sincere pleasure to every friend of improvement and humanity,

humanity, by announcing the final decision of Parliament on the important subject of Vaccine Inoculation. With others, I must regret the very inadequate reward conferred on Dr. Jenner, for one of the greatest discoveries on the records of medical science; but as this feeling is general, and has suggested the idea of an universal contribution, I have no doubt but the patriotism and liberality of the country will be roused, and that our national gratitude will be vindicated by a subscription commensurate to the benefit which Dr. J. has conferred on society. In perusing the Reports of the Committee of the House of Commons, I have, with many others, been struck by the evidence of Dr. Pearson, as a very extraordinary attempt to diminish the well-earned reputation of Dr. Jenner, which has been exhibited to a discerning public. Although I have observed that Dr. Jenner (knowing the solid foundation on which his reputation rests) has constantly disregarded the attempts of Dr. Pearson to injure him; yet it is impossible for his friends any longer to remain silent lookers-on. I shall therefore make some Remarks on the evidence alluded to, in which personal animosity can have no share, as my acquaintance with Dr. Pearson is derived solely from his writings. Impelled by respect for the character of Dr. Jenner, and convinced that gratitude to the real benefactors of mankind is but an act of justice, I think it becomes on the present occasion such an act to animadvert with freedom on the conduct of Dr. P.

You have, Sir, very truly remarked, that all Discoveries have been opposed on the ground of originality. On this subject, I remember to have heard it well observed, that all discoveries of essential benefits to mankind were uniformly attacked in three successive ways. First, the reality of the discovery is denied. Succeeding experiments corroborate its truth, and then we are told, that although true it is of little value. Farther investigation refutes this assertion; and in the last place, we are informed that the discovery is not recent, but to be found in the musty pages of some author of antient date. The History of Science proves the justice of this remark, and the present instance is an additional corroboration of its truth; for in each of these three ways has the discovery of Dr. Jenner been attacked.

Although the subject is an unpleasant one, it becomes necessary to revert to the indelicacy of Dr. Pearson's conduct to Dr. Jenner, from the first moment in which this great discovery was announced. No sooner was Dr. Jenner's work from the press, than we find Dr. Pearson, although at that time totally ignorant of Vaccine Inoculation, publishing a pamphlet, and inviting practitioners to correspond with *him* on the subject, with

with no other apparent view, than to attract the public attention to his name, and bury that of the modest discoverer in oblivion. In the next place, we see him busied in instituting a Dispensary for Vaccine Inoculation. Here we might expect to find the name of Dr. Jenner occupy a distinguished place; but to the astonishment of all, it was not once mentioned. So strongly impressed was his Royal Highness the Duke of York with the impropriety of Dr. Pearson's conduct in the whole of this affair, that he indignantly commanded his name, with which he had hitherto honoured the Institution as Patron, to be withdrawn. Had Dr. Jenner consented afterwards to occupy his proper place in the Institution, the name and support of his Royal Highness would still have been continued; but feeling as he ought to have done the indelicacy with which he had been treated, he very properly declined the honour. Such was the behaviour of Dr. P. at the commencement of the Inquiry, and his subsequent conduct before the Committee, abundantly evinces, that time had not improved his ideas of delicacy or justice. Let us now, Sir, take a short view of his evidence, the whole tendency of which is obviously to depress the claims of Dr. Jenner to parliamentary remuneration. His attack is conducted in a two-fold way. First, he endeavours to shew, that Vaccine Inoculation was known long before the period on which Dr. J. announced his discovery; and, secondly, his own great exertions are brought forward, to impress the Committee with the idea of his claim for reward being equal.

With respect to the first, it is very extraordinary that Dr. Pearson should imagine that all the proofs *he* could possibly bring forward would have much weight with the Committee, for on the slightest examination their futility becomes evident. His motives are best known to himself; but a regard to truth forces us to believe, that they proceeded from a disposition of mind rather uncandid. In his examination on the 14th, the authority of Dr. Heberden is made use of, to prove what on that gentleman's examination was found completely erroneous, for he could not speak to what Dr. P. had asserted he could; and of Mr. Battiscombe, he had no knowledge. On this it is unnecessary to make any comment, the conclusion must be obvious. The next day Dr. Pearson resolved to push his opposition farther; and a bundle of papers was produced, to prove the plagiarism of Dr. Jenner. But how, Sir, is this made out? The papers delivered by Mr. Keate, were written after Dr. Jenner had publicly talked of his discovery; and it even appears from their contents, that the writer had no decisive ideas on the subject. Such was the mighty mass of evidence intended to crush irrefragable facts now firmly established. The

refult may be eafily conceived, Dr. Pearfon and his papers were treated with the *attention* they merited. In the whole of this proceeding Dr. P. feems not to have been aware of the unremitting exertions of the Committee, for had he imagined that his unqualified affertions would have been put to the proof, he furely would have been cautious in hazarding them.

I come now to the comparifon made by Dr. Pearfon between *his* efforts and thofe of Dr. Jenner. Dr. P. afferts, that although Dr. J. fet on foot the inquiry, the practice was almoft entirely eftablifhed by other practitioners; and that the *collateral* facts which Dr. J. advanced have been completely difproved. One would imagine, Mr. Editor, from this, that Dr. J. had merely propofed an ingenious hypothefis, which was to ftand or fall by the experiments of others, and not by any of his own. But how different is the fact! After many years devoted to the fubject, and after repeated experiments made to convince himfelf of the fafety and efficacy of Vaccine Inoculation, Dr. Jenner at length announced his difcovery to the world with that confidence which ample experience had infpired, and accompanied it with a number of cafes to prove its truth. The cafe in general ftands thus: In confequence of experiments, truth is difcovered, and publifhed to the world; thefe experiments are repeated by others, and found accurate; furely then it requires no great fagacity to difcern, that the eftablifhment of the fact is due to the original difcoverer, and not to thofe who, for their own fatisfaction, repeat his trials, and find them juft. So it was in the prefent inftance, Dr. Jenner publifhed what experience had fully proved to him, and *succeeding* experimentalifts found his affertions to be correct.

Dr. Pearfon makes a great parade of the *new* facts which he had difcovered; but in the procefs of his examination, he is ftripped of his borrowed plumes. "He had already learnt that young infants might be inoculated with fafety;" and from whence did he learn? Why, from the very work to which he was indebted for all his knowledge on the fubject, from Dr. Jenner's firft publication, in which the cafe of his own infant is fully related. So much for the *new* fact; and, to the difgrace of the times, we have many of the fame ftamp. Fearlefs of affertion, Dr. P. boldly ftates, that he has overturned all the collateral facts publifhed by Dr. Jenner: Yet, in oppofition to this, every one of them, fingular to tell, (and which confers the higheft praife on Dr. J.) remains unfhaken. The origin of the difeafe from the horfe, at firft created fufpicion; but Dr. J's own experiments, fince fully confirmed by thofe of Doctor Loy, have completely eftablifhed its truth. So much, Sir, for Dr. Pearfon's facts. It is painful to criticife the fubfequent part of his examination, for it exhibits fuch evafion, as is little confiftent with a candid

did mind in search of improvement. "Did you never hear of inoculation having been performed by Mr. Cline with matter furnished by Dr. Jenner, previous to the commencement of your Vaccine Inoculation? Such was the question; and what the answer? *Cannot distinctly recollect!* Shameful evasion respecting a simple fact. But the cause is obvious, for at the time this inoculation took place by Mr. Cline, Dr. Pearson had asserted, that Dr. Jenner was not in possession of any Vaccine matter. I shall spare Dr. P. and not push this answer any farther.

The last part of his examination I shall notice is his answer to the question respecting *his* matter producing eruptions. "Was not the matter found fault with? "No, but people were *disappointed.*" Now, Sir, I must contend, that between finding fault and being disappointed in such a case, there was no room to attempt drawing a distinction, for the one must have inevitably followed the other. In consequence of the matter sent by Dr. Pearson, a disease pretty similar to small-pox was produced, which must, of course, have occasioned very great disappointment; and as it was known that the matter sent by Dr. Jenner *never did occasion pustules, great fault* must have been found with that *sent by Dr. P.* So great mischief attended the matter sent by this Gentleman, that Vaccine Inoculation was in danger of falling into disrepute; and thus, in consequence of the *exertions* of Dr. P. there was reason to fear that one of the greatest improvements of modern times would have been lost. But the persevering industry of Dr. Jenner and his friends overcame this unlooked for obstacle; and, contrary to the assertion of Dr. P. it is now ascertained beyond dispute, that Small-pox-like eruptions from genuine Vaccine matter cannot appear. Another important error Dr. P. has fallen into, is of very serious consequence. He has stated, that it is indifferent at what period of the pustule the matter is taken for subsequent inoculation. To those, however, who wish well to this valuable discovery, and who have no personal views to serve, it is well known that it is of the first moment to attend to the period on which the matter is taken, and that from neglecting this caution a vast number of errors have been committed and prejudice has been created against Jennerian Inoculation. From this cursory review of Dr. Pearson's evidence, I think we may pretty fairly appreciate the motives of his conduct, and at the same time learn *how little* Vaccine Inoculation has been essentially promoted by *his* endeavours. Foiled in his attempts before the Committee of the House of Commons to depreciate the merits of Dr. Jenner, one would have imagined that Dr. Pearson would desist; but in his card to you, Sir, we again find him renewing his attack,

but

but on different grounds; for, unmindful of his own exertions to forward the Jennerian Inoculation, he now questions the competence of a Committee of the British House of Commons to decide on a simple fact; and, talking like a lawyer, he says, "It was coram non judice." By this, if Dr. P. means any thing, he wishes to insinuate, that the Report ought to have little weight with the public; that doubts ought still to be entertained respecting the merits of Dr. Jenner. Dr. Pearson has advertised a pamphlet on this subject; but if it contains the same sentiments as those delivered in his Evidence, and the same inconsistency as marks the spirit of his Card to you, I will venture to predict, that its publication will only tend to increase that discredit which his recent conduct has attached to his name. I shall conclude with observing, that however great might have been the benefit which Dr. Jenner by his discovery had conferred on society, if, at the same time, it had been accompanied in him with unbounded vanity, I should not have been forward to vindicate his fame, and others might have rejoiced at every attempt to diminish his reputation; but his unassuming diffidence, and the little pains he has taken to raise his reputation, or fortune, by this great discovery, elevate in my mind his character beyond praise, and render it a duty incumbent on every friend to virtue and to science to cherish his reputation, and shield him from the detraction of envy.

I shall now, Sir, apologise for trespassing on your time so long; but your love of justice and detestation of envy, will, I hope, induce you to pardon the length to which the preceding remarks have been extended. In a shorter compass it would have been impossible to convey sufficiently my sense of the injustice which has been done to Dr. Jenner; and some points even, as you will readily perceive, might have admitted of more ample discussion than I have ventured to give them: Enough, however, has, I hope, been said to point out *Dr. Jenner* as the man entitled to public veneration. Of his efforts I would finally speak in the language of Darwin's friend,

The work is done! Nor Folly's active rage,
Nor Envy's self, shall blot the golden page.

I am, &c.

C. *

Bath, August 12, 1802.

* The intelligence displayed in the above article, as well as our knowledge of its respectable author, have induced us to give it a place, although we do not feel strongly disposed to enter upon a controversy, respecting the points of which, the opinions of our well-informed readers are undoubtedly decided.

EDITORS.

Experiments made for the Purpose of proving that the Small-pox is a Disease common both to Men and Brutes; by E. VIBORG, *Professor of the Veterinary College of Copenhagen.*

IN a Treatife, entitled, "Experiments and Obfervations on the Effects of different Poifon in Animals," which I prefented in the year 1792, to the Royal Danifh Society of Sciences, I communicated feveral experiments which I had made by inoculating with the fmall-pox an afs, horfe, cow, fheep, hog, dog, and cat; of which animals, however, the ape was alone infected, and received the fmall-pox. Notwithftanding thefe experiments, I remarked, that the tranfition of the fmall-pox from men to our domeftic animals ought not to be denied, becaufe Mr. *Barrier*, veterinarian, is faid to have obferved a difeafe in dogs, perfectly fimilar to the fmall-pox in men. This obfervation by no means afcertains the identity of both difeafes, becaufe that variolous eruption in dogs might have been a peculiar cutaneous difeafe, probably originating from a proper infective matter, though it agreed in many refpects with the real Small-pox. It cannot therefore be proved but by experiments of inoculation, whether the fmall-pox is a difeafe belonging both to men and animals; and only in cafe the fame infective matter produces in different animals difeafes of the fame nature, we can no longer doubt their real identity. It is known from the obfervations of French phyficians, that the cow-pox defends the fheep againft the fheep-pox infection, in the fame manner as they fecure men from the fmall-pox, which feems evidently to prove the identity of the cow-pox and fheep-pox; and this obtained an additional proof, by an obfervation made in fome parts of Denmark, that the fheep-pox appeared at the fame time with the fmall-pox; and it is faid to have been likewife obferved in a town of Germany, that hogs received a variolous eruption at the time when the fmall-pox made their appearance. Thefe obfervations, however, being contrary to my own experiments, and to thofe of Camper, I purpofed to repeat them on animals of different kinds. Accordingly I procured matter from malignant fmall-pox, with which, when ftill fluid, and only three days old, I inoculated two puppies, by making fmall incifions into their fides with a lancet, and by rubbing in at thefe places the fluid matter. The third day after the inoculation the incifion had received a red and tumid margin, but no other morbid fymptom appeared. On the fourth, fifth, and fixth day the fwelling and rednefs of the incifions difappeared,

and

and both dogs ſeemed to be as well as before. On the ſeventh day, however, red ſpots were ſeen on the naked ſkin of the belly and thighs, which on the 8th and 9th days, received in their middle a white puſtule, filled with matter, exactly ſimilar to the ſmall-pox. I was exceedingly ſurprized at the ſucceſs of theſe experiments, as they removed all doubts with reſpect to the poſſibility of propagating the ſmall-pox in dogs, which my former experiments had made me conceive; and I could not account for their not having before ſucceeded, though they had been made on four different dogs, with dry as well as liquid matter, the infective power of which was otherwiſe experienced. The only way of explaining theſe oppoſite events of the inoculation, is to ſuppoſe, that in the firſt experiment I accidentally met with dogs that were incapable of receiving the ſmall-pox; a circumſtance not uncommonly experienced in men, however ſingular it may ſeem, that it ſhould have juſt happened four times, one after another.

After I had made theſe experiments, I accidentally read in the Medical and Phyſical Journal, Cit. *Marſillac's* notice of a method of inoculation, by giving to two children and to a dog variolous matter ſpread between ſlices of bread and butter, which they ate, and by which means the children, as well as the dog, are ſaid to have got very mild ſmall-pox; an obſervation, which may be alleged as an argument for the above opinion, that the ſmall-pox are common to dogs and men. I continued my experiments on a pig, a ſheep, and an ape. Although it may appear needleſs to repeat the inoculation on the laſt animal, of which it is ſufficiently ſhewn that it takes the ſmall-pox, yet I ſhould conclude, from its being infected, that it was not to be aſcribed to the matter, if the other animals had not taken the infection. Having, beſides, previouſly inoculated the ſame ape for the cow-pox, which had only occaſioned an eryſipelatous ſwelling at the place of inoculation, I wiſhed to aſcertain, whether this effect of the cow-pox would be ſufficient for deſtroying the future action of the ſmall-pox. June 29th, the ape *, a pig, and a lamb, were inoculated with dry ſmall-pox matter, which had been collected on cotton threads five days before.

* The ape taken for this experiment was *Simia innua*. The firſt I inoculated was *Simia cynomolgus*; and I am informed, that *Simia ſciurea* received the ſmall-pox at Amſterdam in the year 1786, by being in the ſame room with a child that had the ſmall-pox, but without having come in immediate contact with it. It is therefore aſcertained of three ſpecies of that genus, that they have received the ſmall-pox; and from the laſt inſtance it appears, that they are infected, not only by immediate application of the poiſon, but alſo by means of the atmoſphere.

Small

Small incisions were made in the arm-pit of the ape, and under the shoulder of the lamb, into which the matter was rubbed in; but in the pig, the thread was drawn through the skin like a seton. In all three animals, the common symptoms of inflammation appeared at the wound on the 4th and 5th day, but particularly the ape had a considerable swelling round the wound, extending to the axillary glands, and which seemed to be very painful. The animal was less lively, but had always a good appetite. On the 6th day after the inoculation, the tumour was still the same, and began to receive matter in its middle. The next day variolous eruptions were seen at the chin and right eye, and others appeared by degrees on different parts of the body. These small-pox dried up in the common way, and the 20th day after the inoculation the ape was perfectly recovered, and only a small scab remained on the place of inoculation. The wound made on the pig was not so bad as in the ape; the 7th day, however, the belly was covered with many red small-pox, which having received matter, the next day dried up as usual. The animal shewed no symptom of any internal illness during all this time. In the lamb, the topical symptoms of inflammation disappeared the 6th and 7th day, without having produced the least variolous eruption. I had not expected that the sheep would have remained free from the infection of the small-pox; but though I endeavoured in vain, by repeated experiments, to communicate the small-pox to this animal, yet I strongly suspect that it admits the infection; as it is proved by experiments, made at the Royal Veterinary College at Berlin, that the cow receives the small-pox, which, when inoculated on children, produce again the real small-pox. It would be worth while to try, whether the cow is secured from the infection of the small-pox by a previous infection with the cow-pox. It is likewise interesting to examine the relation between the sheep-pox and the small-pox, to ascertain whether the small-pox are prevented by the inoculation of the sheep-pox, and if the last can be propagated to men, cows, and other domestic animals; whether the cow-pox inoculated to dogs produce the distemper in dogs, as has been intimated by Drs. Jenner and De Carro. But ample is the field which is offered to us by the investigation of the different contagia of animals of their respective relation, and of their capacity of counteracting each other.

CRITICAL ANALYSIS

OF THE

RECENT PUBLICATIONS

ON THE DIFFERENT BRANCHES OF

PHYSIC, SURGERY, & MEDICAL PHILOSOPHY.

A Fourth Dissertation on Fever, containing the History of, and Remedies to be employed in, irregular intermitting Fevers; by GEORGE FORDYCE, M.D. F.R.S. &c. &c. *London,* 1802, 8vo. pp. 112.

WE have again to begin our Monthly Analyſis by a poſthumous work, the concluding labours of a veteran in the profeſſion of Phyſic, highly eminent for his ſtrength of mind and originality of thinking.

We cannot but conſider it as a fortunate circumſtance that the ingenious author was able to complete the Treatiſe before us, as it well concludes the Series of Eſſays of Fever, which he had ſucceſſively given to the public, if not by exhauſting the ideas which he might have to impart to his readers, at leaſt by carrying him beyond the limits of his perſonal experience; of an experience corrected by ſound ſenſe and acute obſervation, which gave ſo much value to his former Eſſays.

The ſubject of the preſent Diſſertation is the irregular intermitting Fever. The author begins with an explanation of the type of the ſeveral intermittents, and ſhews how, from occaſional circumſtances, the return of the exacerbation may be either haſtened or protracted, forming the *anticipating* or *retarding* intermittent. This accidental irregularity again may be repeated for ſeveral times ſucceſſively, till ſo many hours are either gained or loſt that the type may be changed, and a quotidian may be thus protracted, or a quartan anticipated, into a tertian. The indiſpoſition of a paroxyſm to return in the night time, very materially contributes to this total change of type. After ſeveral remarks on the type of Fevers, the author then proceeds to enumerate the irregularities and accidents which occaſion intermittents to quit the ſafe courſe of a regular tertian, and to become more dangerous in conſequence. The firſt of theſe accidents which he mentions, is a prolongation of the paroxyſm; and this is particularly liable to happen when inflammatory fever, or, as the author would term it, *general inflammation* is preſent. This diſeaſe, which is more commonly known by the term *inflammatory diatheſis,* is peculiarly characteriſed by hardneſs

hardneſs of pulſe; and the mention of this term ſerves to launch the author into a digreſſion concerning this phenomenon, not irrelevant indeed to the ſubject of Fever, but in which he introduces ſeveral of thoſe obſervations concerning the coagulation of the blood, and the operation of the vital principle, which muſt be familiar to all who have peruſed the former works of this ingenious writer.

The Author then takes ſome pains to prove, (what is not often doubted) that there really is ſuch a thing as hardneſs of the pulſe; though Dr. William Hunter, as he informs us, conſtantly denied that he could feel any ſuch diſtinction in the pulſation of the artery. This ſenſation of hardneſs, the Author proceeds to obſerve, is conſtantly connected with a diſpoſition to ſlower coagulation in the blood than in time of perfect health; and hence he takes occaſion to introduce the explanation of the appearance of the buff coat of inflamed blood; the circumſtances of the ſize of the orifice in venæſection; the form of the baſon in which the blood is received, &c. which are detailed with ſufficient clearneſs, but unaccompanied with any original or very important obſervation. The ſum and ſubſtance, therefore, of theſe remarks are contained in the following clauſe:—"The Author further affirms, that when the pulſe has a feel of hardneſs, the blood taken from a vein is longer coagulating than when no hardneſs is to be felt; and that therefore there is actually a ſenſation of hardneſs to be felt in the pulſe, in contradiction to all the other ſenſations, viz. That the action of the arteries which gives this ſenſation, alſo produces a diſpoſition to make the blood remain longer fluid after flowing from a vein into a baſon under the ſame circumſtances."

The reader might be at ſome loſs what to expect after the following exordium, which begins the ſucceeding paragraph:—"It is to be obſerved, that every thing on this earth follows by gradation. The twilight which begins in the morning, gradually acquires meridian ſplendour, and gradually ſinks from its meridian ſplendour into the ſhades of night. There is a gradation of animals from human beings, until they deſcend through quadrupeds, fiſh, and reptiles, and come down at laſt to corals, ſponges, and muſhrooms, until it is difficult to ſay which is animal or vegetable.—*Such* gradations are there alſo in the feels of the pulſations of the arteries."

The ſenſation of obſtruction in the pulſe is next noticed, which the Author affirms, differs eſſentially from that of hardneſs, and derives its origin from a different affection of the pulſe, for the feel of obſtruction may be very great; and yet the blood drawn from a vein at this time will coagulate immediately, and conſequently not exhibit the buff coat.

It is certainly very difficult to expreſs by words that delicacy of feeling, that nicety of *tact*, which is only to be acquired by long experience in organs originally ſenſible: but we may be allowed to obſerve, that to fulfil any uſeful purpoſe, there ought to be ſome immediate and decided criterion between the feel of *hardneſs* and *obſtruction*, independant of the ſubſequent teſt of the ſpeedy coagulability

gulability of the blood, since the object of this mode of examination of the state of the circulation is to determine whether or not venæsection ought to be employed.

The Author then applies his favourite theory, concerning the cause of the coagulation of the blood, in the following words:— "The coagulable lymph, in consequence of an animal's being alive, remains fluid; the mucilaginous part of it remains dissolved in water. In the blood-vessels of dead animals the mucilaginous part separates from the water with which it is combined; it is therefore the life of the blood-vessels which keeps the mucilaginous part dissolved in the water, and consequently the coagulable lymph fluid." From hence it is a legitimate inference, than when the blood is longer than usual in coagulating, so as to form the buff coat, there must have been a superior action of the living power in the arterial system; and that, as hardness of pulse indicates that state of blood in which the buff coat would be formed after venæsection, it hence indicates equally the presence of superior action of the living power.

"This superior action, (to return to the subject of intermitting Fever) when present, prolongs the time of each paroxysm, and sometimes proves fatal; perhaps by a sudden affection of the brain. It also is liable, not only to prolong the paroxysm, but to prevent the crisis being perfect; and thus the disease will have the appearance of a continued Fever, only with exacerbations at the times of the regular paroxysm. This was called by the Greeks, Hemitriteon; and by Celsus, Semitertain."

The Author then proceeds to shew the effects of this continued inflammatory diathesis on the quotidian and quartan types of Intermittents. The sole remedy which he recommends in such a case, is blood-letting; and he takes occasion to introduce here a very clear and satisfactory view of the mechanical effect of this operation upon the arterial system when under inflammatory action. Some observations on the employment of the auxiliary remedies of ipecacuanha, antimony, and cinchona, conclude the account of the irregular Intermittents in temperate climates.

From these the Author proceeds to the dreadful irregular semitertians, which form the direst calamities in hot climates to the natives of more temperate regions. The infectious nature of the irregular intermittents of hot climates, has been a point of very warm controversy; and the Author does not pretend to give a decided opinion on the subject, but rather inclines to the domestic origin of these diseases during the heat of summer, and the consequent putrefaction of animal and vegetable matter, (as in the instance of the memorable yellow Fever of Philadelphia) and supposes, that though all Fevers are, to a degree, infectious, this is not so in any very considerable degree. To these speculations he adds a clear and accurate sketch, or general description, of the leading symptoms of the irregular Intermittent of hot climates, which he gives, not from actual observation, but from written accounts,

counts, and from those given to him by medical practitioners, who themselves have seen much of the disease, or have suffered under it in their own persons. For the medical treatment the Author takes upon him to condemn *all* the violent means that have been employed by the physicians who have actually had the disease under their care; and in this sweeping condemnation, he includes bleeding, purging, the use of mercury, and cold ablution; and recommends tartarized antimony, if the stomach will bear it; cinchona, if any crisis comes on; but seems to be principally disposed to leave the whole to Nature.

In the later part of this Treatise the Author returns to the irregularities that take place in the intermittents of temperate climates, the most formidable of which are peripneumonic affections of the lungs; a propulsion of blood from the exterior parts to some of the viscera, particularly the spleen and liver; tumours, apparently schirrous, forming contiguous to the hepatic duct; jaundice; ascites; œdema; and sometimes diarrhœa. For the particular observations relative to the treatment of these symptoms we must refer the Reader to the Treatise itself; we shall only add, that of the metallic preparations of arsenic, zinc, copper, and iron, which have usually been employed in similar cases, the Author has never succeeded in enabling the constitution to bear a full trial of the former; and of the three latter he speaks with a very guarded confidence.

The Edinburgh School of Medicine, containing the preliminary or fundamental Branches of professional Education, viz. Anatomy, Medical Chemistry, and Botany; by William Nisbet, M. D. *in four Volumes 8vo.* 1802.

The medical world have given a favourable reception to the elementary work published by the Author some time since, and entitled *the Clinical Guide.* The object of the present volumes is to form a set of school books for the Student of Medicine, by exhibiting in a compendious view the principal facts relative to the elementary studies of Anatomy, Botany, and Chemistry (the two latter considered principally in a medical view) whereby the ideas of the Student may be directed, and the leading facts recalled to his memory. The arrangement which the Author follows is strictly that which is pursued by the Professors of Edinburgh; and this gives to these volumes a double advantage, to the Students of that illustrious Seminary, of being able to employ this Compendium as a kind of text book; and to other readers, that of viewing in a concise form the arranged method which has appeared the most eligible to such teachers as a Monro, a Black, and a Rutherford.

In a work which is professedly a Compendium, all that can be expected is clearness, accuracy, and a dextrous *sifting* of the whole mass of materials, so as to reject the digressional and illustrative part, and leave only that which is absolutely essential to the subject. We think that the Author has very well considered the relative importance of the matter before him, by the space allotted to each. The two first volumes are devoted to Anatomy, the third

to Chemiſtry, and the fourth to Botany; and the quantity of matter included in each is ſufficient for a pretty full ſketch of the different ſubjects. The moſt pains appear to us to have been beſtowed on the anatomical part, and in it the Author introduces occaſionally the outline of certain phyſiological diſcuſſions, which have received particular attention in the ſchool from which he has taken this compilation. The arrangement of the anatomical part is ſomewhat complicated, but, perhaps, not leſs inſtructive on that account; it attempts to include the conveniences of a diviſion into ſpecies, and one founded on the union of diſſimilar and complicated organs which perform the ſeveral functions. A ſketch of Morbid Anatomy is ſubjoined, ſelected principally from the valuable work of Dr. Baillie, to whom one of the volumes is dedicated. The whole of this part is executed with conſiderable ſkill and fidelity, and a few general plates are introduced, which are as illuſtrative as anatomical plates of this diminutive ſize can be expected to prove. We think, however, that a little more might have been done in what may be called the mechanical arrangement, in aſſiſting the eye of the reader: For inſtance, only two running titles are introduced; the firſt, "Oſteology," and all the remainder "Demonſtration and Diſſection," which laſt includes the whole of the ſoft parts, the muſcles, veſſels of every kind, nerves, viſcera, &c. A few of the names are tranſlated from the common Latin form into Engliſh; which exhibits rather a groteſque aſſemblage, though certainly not more abſurd than the original; ſo, we have the the terms, *sacred bone, rump bone, nameless bones, boot-like bones,* &c.; but, a reform of anatomical nomenclature is too gigantic an undertaking to be brought about by ſuch attempts.

The third volume includes the Chemiſtry, which, by the help of 700 pages of a cloſer type than the reſt, forms a compendium of conſiderable ſize, ample enough for all the neceſſary objects to the Medical Student embraced in this ſcience. The elementary treatiſes on Chemiſtry are ſo numerous that it would be hardly poſſible, with common induſtry, to avoid giving a compendium which ſhould contain abundance of valuable matter. It is principally in the ſelection and arrangement that the merit of the compiler conſiſts. We cannot find much to commend in either of theſe particulars, and we might point out ſeveral errors of ſome conſiderable magnitude. The order of general arrangement is Airs, Waters, Inflammables, Salts, Earths, and Metals; an order which it requires much knowledge in the writer to follow, conſiſtently with modern diſcoveries, without entangling and bewildering himſelf in a multiplicity of anomalies and repetitions. The whole Chemiſtry of Vegetable and Animal Matter follows by way of Supplement, and is diſpatched in very few pages; but for the Medical Student more attention might well have been beſtowed on them. A tranſlation of the London and Edinburgh Pharmacopeias is ſubjoined as the part peculiarly devoted to Pharmacy.

The fourth volume contains the Botany, a ſcience perhaps hardly ſufficiently attended to in medical education, but for the purſuit of

which

which more opportunities are wanted than generally fall to the lot of young men; ſince the conveniences afforded by large towns in the other branches of ſcience ſo ſtrongly recommend them as the ſeats of Schools and Univerſities. About half the preſent volume is occupied with a full and clear account of the ſyſtematical part of Botany and the Linnean arrangement: in the remainder the Author gives a ſuccinct account of particular articles employed in the Materia Medica, derived from the vegetable kingdom, in which the acknowledged authorities are followed with ſufficient exactneſs.

The errors of typography are numerous in theſe volumes, and particularly ſo in thoſe parts in which ſcientific names occur, a circumſtance of conſequence in an elementary book, as the Tyro may not be always able to correct them; and as the blame of ſuch numerous errors cannot with any fairneſs be thrown upon the ſhoulders of the preſsman or compoſitor, it muſt revert to the author.

References to the Bones, for the Use of Anatomical Schools; by BENJAMIN SIMONS, M.D. Edinburgh, 1801, pp. 131.

To underſtand the intention of this ſmall work, we muſt give the author's introduction. "Theſe References were compoſed for the uſe of an Anatomical School the author intends to inſtitute, and as a Syllabus to that department of a Courſe of Lectures which includes the bones. The plan is, to ſelect a ſet of the beſt marked bones, to annex to the proceſſes, foramina, &c. the numbers prefixed to their reſpective references: Thus labelled they are to be delivered to the ſtudent."

The ſmall publication before us is, therefore, ſuch a deſcription of the bones as it would be neceſſary for the ſtudent to retain in his memory; one in which all the parts worthy of note are diſtinctly enumerated; and might with little variation be converted into ſo many queſtions, whenever the teacher wiſhed to examine his pupil. It will be ſufficient to obſerve that they are accurate without being prolix; and any method which will aſſiſt the memory in the *Grammar* of Anatomy deſerves praiſe. The following will ſerve as an example.

"INFERIOR SPONGY BONE.

Hanging low in the noſe, poſteriorly from the naſal lamella of the palate bone, and anteriorly from the ſuperior maxillary bone.

No. 1. Concave ſurface, facing the antrum.

2. Convex ſurface towards the ſeptum naſi.

3. Poſterior proceſs extended over a part of the antrum.

4. Anterior proceſs, connected to the os unguis, and ſuperior maxillary bone, ſo as to aſſiſt in forming the canal for the lacrymal duct.

The concave ſurface does not extend down to the inferior edge of the bone. The ſide of the inferior edge oppoſite the antrum is convex; and that to the ſeptum naſi, if not concave, is flat."

MEDICAL

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Preliminary Observations contained in the Program of the Prize proposed by the Society of Medicine of Bourdeaux, in its public Sitting of the 27 Fructidor, Year 9.

Hippocrates is, without contradiction, the greatest medical genius of antiquity; his writings, for a length of ages, have been always honoured by true physicians, always imprinted with the veneration of the wise, always preserved with a religious attention. By an unanimous assent, by the universal voice, Hippocrates is proclaimed, in all times and in all places, the oracle, the father, and the god of Medicine. Of all the statues erected by the antients to great men, his is the most inviolate, and the most revered. His works breathe candour and frankness; they are eternal testimonies of the depth of his genius, of his veracity, of his modesty, and of the cares which he every where takes to form a virtuous physician. Lastly, we only perceive in his soul one sentiment, the love of good; and in the course of his long life, one single deed, the relief of the sick. Happy the people, if the successors of that supreme legislator had always preserved his doctrine, as they kept at Rome, the fire of Vesta!

But too often physicians, smitten with the love of systems, have lost themselves in the bottomless abyss of conjecture; they have wished too often to substitute the product of their imagination to the true laws of Nature. How many sects do we find in Medicine? (Should there any exist in the art of healing?) How many theories alternately adopted and rejected? Galen abandons himself to discussions more ingenious than useful; the Arabs refine on the subtleties of Galen; the alchymists burn the works of the ancients; then the follies of astrology, of geomancy, of cabalistical learning, were introduced into medicine. In all the crucibles are sought the *fountain of youth, the elixir of long life, and the stone of immortality.* In the midst of this universal delirium, Hippocrates remains alone, upright, as a column not to be shaken; the works of this great man are read, studied, commented upon. Vallesius, Baillou, Houlier, Duret, make numerous disciples; the Hippocratic medicine shines again in all its lustre, and the Temple of Cos becomes a sacred ark, out of which there is no safety.

Many learned men have made the catalogue of the writings of Hippocrates; all cannot have an equal right to our confidence. Galen among the ancients, and Gruner among the moderns, have shewn much criticism and exactitude on this subject; and from these two physicians, the legitimate works of the father of medicine

tine are known to us. It is in these treatises, that the genius of Hippocrates is included, all intire; it is in those immortal writings, commented on by so many great practitioners, shining with a lustre that twenty-two centuries have not tarnished, that we find the doctrine of the first and most skilful legislator of the art; there we see the extent of his knowledge in the different parts of Clinical medicine. In effect, what depth in his aphorisms! What sagacity in his book *of airs, of waters, and of places.* What accurate notions on the temperature of the different seasons of the year; on the position of cities; on the maladies to which they are exposed; on the manner of living of the men who have fixed their abode there. What judgment in his *Treatise of Prenotions!* What candour and ability in his *History of Epidemicals!* What wisdom in his book of *Diet in acute Diseases!* It is apparently the God of Medicine pronouncing oracles; it is Nature herself dictating her laws, by the mouth of the most worthy Interpreter she ever had.

It is very astonishing, that among the commentators of this great man, not one has been found who has presented us with his doctrine in all its *ensemble,* with that series, that concatenation of ideas which makes them one illustrate another; and lastly, with that order which includes in particular divisions (but with that coup d'oeil of genius, which, as Montesquieu says of Tacitus, abridges every thing because it sees every thing) what the Sage of Cos has told us on the signs, on the prenotions, on the causes, on the curation, on the regimen, on the maladies of different ages, on the aphoristic art, on the epidemicals, on medical meteorology, on different points of chirurgy, &c. &c. Would not an admirable whole result from this assemblage? And of these different traits, formed by a skilful artist, should we not have at length what we might call the *tableau of Hippocratic medicine?* It is precisely this *tableau,* the execution of which the Society now calls for.

But however well this work might be done, it should be included within reasonable limits. The Society of Medicine does not require the eulogium of Hippocrates; this eulogium is already in the mouth of all true physicians; neither does it desire a notice on his life; what we want the most in that of illustrious men, is the history of their writings. Neither does the Society demand a new catalogue of his works, nor a dissertation on those which are his, and those which do not belong to him. Gruner accomplished this last task in 1772; and certainly, it would be difficult to find a criticism more judicious, and a philology more vast, than of that learned physician. Neither, lastly, does it want a *commentary* of his works; who could comment on them better than Vallesius, than Prosper Martian, than Gorter, than Coray, and so many others?

From an union of all these motives, the Society of Medicine of Bourdeaux is induced to offer a prize of the value of 300 francs, to the person who shall present with order, regularity, and method, the *Ensemble of the Doctrine of Hippocrates,* or the *Tableau of the Hippocratic Medicine.* The prize will be adjudged in the public sitting of Fructidor, year 10. The Memoirs to be received till the 1st Ther-

1st Thermidor, of the same year. They should be addressed carriage free, to the Secretary General of the Society. The authors are incited to join a sealed billet, containing a motto, with their name and address. The billets only will be opened, which will be joined either to the Memoir that shall have gained the prize, or to that which shall approach the nearest to it. The residing members of the Society of Medicine are excluded from the *concours.*

Description of a new Species of Phaca, by Citizen CLARION. *Phaca glabra. P. caule ramoso prostrato, foliis ovato-lanceolatis, florum alis integerrimis, leguminibus glabris.*

The root of this plant is vivacious, apparently ligneous, simple or bifurcated, a little fibrous; the neck (collet) gives rise to many stalks, rude, expanded, chamfered, single below, and branching towards the top; the leaves are alternate, few in number, pennated in odd numbers *(avec impaire)*; the common *petiole* bears from nine to thirteen small oval leaves, terminated by a point rather saliant and as it were glandulous; of a yellowish green under; the stipules are opposite, oval, acute, sometimes united, and then they sheath the stalk; the peduncles over-pass the leaves and carry an ear of horizontal flowers or *penchees*; the calyx has five teeth, and is covered with black down or hairs; the corolla is papillonaceous white; with the exception of the *carene,* and of the part of the wings near to the *carene,* which are violet coloured. The etendard is oval, chamfered, elevated behind; the wings are oval-linear, curved, shorter than the standard *(etendard).* The ovary is supported on a short pedicle, and is surmounted with a style, curved semicircular, and terminated by a flat stigma. To this pistil succeeds a cod or husk glabrous, pediculated, vesiculous, pointed at the two extremities; the upper suture enters again a little within the husk and bears reniform grains or seeds. The tumour glabrous Phaca differs from the Phaca Gerardi viii. by its glabrous husk; from the Alpine Phaca by its upright stalk; and from the Phaca Australis by its entire wings. It grows in the mountains of Pray, department of lower Alps. It flowers in Messidor.

On a new Genus of Insects, named Atracto-Ceros.

This insect has been brought from the kingdom of Oware, in Africa, by Cit. Palissot Beauvois. The name which this voyager gives it, signifies *antenne-fuseau.*

Agreeably to its form, it is distinguished from other coleopteres, in having wings much longer than its etwees, and which do not fold back under them, and in having five articulations to all the tarsi. This last character approaches to the *staphilines,* while the preceding one bears analogy to the *necidales.* The form of its antennulæ is very singular. Cit. Beauvois thinks that this insect lives in the woods.

Extract

Extract of a Memoir on two Species of non descript oviparous Quadrupeds, lately read to the National Institute of France, by Citizen LACEPEDE.

We find among reptiles, all the combinations of digits, from five to one, taken between two pairs of hands or claws. There wanted to these combinations those of four digits, or two digits, or one single digit to each of its four claws. The two species which Cit. Lacepede describes, fill up two of these three desiderata. One has four digits to each foot; he names it *tetradactyle*; the other has only one, he calls it *monodactyle*. These two lizards ought to establish two new sub-genera in the genus of lizards; or, according to the method of Cit. Lacepede, they ought to pertain to the chalcide genus of the natural method proposed by Cit. Alex. Bronguiart.

The chalcide tetradactyle has the four hands very small, and so short, that they can hardly reach the earth; and indeed, it does not use its hands to advance, it creeps in the manner of serpents; the first and the fourth digits are so small, that they are perceived with difficulty; the third, on the contrary, is very long. The body is slender, cylindrical; the tail is three or four times longer than the body; the scutcheons of the head are pretty nearly disposed, like those of adders. The tongue is flat, broad, but short, and somewhat round towards the end. A sort of furrow is excavated on each side of the animal, from the angle of the chops to the hind foot. The upper scales of the neck and body are almost square, raised by and disposed in rings; it was two decimetres and nine centimetres in length.

The chalcide monodactyle has the legs still shorter and weaker than those of the tetradactyle; only one single digit is found to each foot. This chalcide is also very long, very slender, cylindrical, and rather resembles an animal of the family of Ophidians than a Saurien reptile. The tongue is round at the end. The upper and under part of the body and of the tail are furnished with scales, long, pointed, and raised. These scales, which anticipate laterally on one another, form transversal rows, partly placed one above another, and apparently festooned. This reptile was four decimetres eight centimetres in its total length.

Cit. Lacepde terminates this memoir, by remarking, that the hollow tubercles which we find disposed in one row under the thighs of lizards of the gecko genus, do not constantly appear in all the individuals of the same species. He cannot yet assign the reason of this singular difference. He concludes from hence, that the distinctive characters of the species which he has named gecko and geckotte, as they cannot be taken from the presence or the absence of those turbercles of the thighs, ought to be drawn from the form of the tubercles of the head and of the body, which are equally globulous in the geckos, while they always represent a small pyramid with three faces in the geckottes.

Citizen

Citizen Percy, an Aſſociate Member of the National Inſtitute, lately read in one of its ſittings, ſome Medical and Philoſophical Obſervations on an univerſal Ankiloſis, or motionleſs ſtate of body in all the joints, and ſhewed the Claſs a ſkeleton of the unfortunate perſon who lived twelve years in that ſtate, worſe than death; of which, according to the expreſſion of Cit. Percy, it is a terrible image, and a long forerunner. This ſurgeon in chief of the armies, after having cited the ankiloſes obſerved by different phyſicians, and eſpecially by Real-Colomb, and Cit. Portal, informed the Claſs that Cit. Francois Maurice Marcien de Simorre, an old officer, had contracted in the campaigns of Corſica, a gouty rheumatiſm, which took from him ſucceſſively the uſe of his fingers, his hands, and his feet, and which, after exceſſive pains, deprived him of all motion, even of that of the lower jaw, and cauſed him to loſe his ſight. He ſpent many years in an armed chair, without obtaining a moment's ſleep, notwithſtanding the ſtrongeſt doſes of opium. Reduced to a ſtate wherein he could only ſuck a little broth or wine, through the very ſmall interval left between the upper and lower teeth, he had two inciſive teeth pulled out, and by favour of the opening which he procured by this operation he could ſpeak more freely, and could imbibe liquids with a pipe, and even ſwallow a little haſhed meat. His body, a ſort of animated ſtatue or living carcaſe, formed only one piece; all his bones were ſoldered into one another; and notwithſtanding this extreme pain, the converſation of Simorre was often very gay, and he dictated every year an almanack in verſe, which was eagerly bought up to relieve his miſery, without hurting his delicacy. That of the year 5 is remarkable for this motto:

Privé de la lumière, perclus de tout ſon corps,
Il ſe rit de la vie, en attendant la mort.

Simorre had however a phyſiognomy full of expreſſion, and even of hilarity. The muſcles of his face had acquired a ſingular mobility, they were inceſſantly in action, either to ſupply the geſtures which he could no longer make, or to ſhrivel up the ſkin and drive away the inſects that came to ſting it. Cit. Percy has developed the original and the progreſs of this fortunately very rare diſeaſe; has examined into its cauſes, explained the alterations of the bones, and in particular, thoſe of the joints of Simorre, whoſe ſkeleton, a monument at once frightful and valuable, of the human figure, is now depoſited in the Conſervatory at the School of Medicine of Paris.

In a ſecond Memoir, Cit. Percy has deſcribed all the effects of a monſtrous voracity, to which he has given the name of *Polyphagy*. A young man of the neighbourhood of Lyons, and who had early followed a troop of *bateleurs*, had habituated himſelf to ſwallow pebbles, enormous maſſes of rejected meats, panniers of unripe fruit, and even living animals. Some dreadful accidents and terrible cholics could not make him quit a dangerous habit, which ſoon became an imperious neceſſity. Enrolled in the beginning of the laſt war in one of the battalions of the army of the Rhine, he

fought

fought near an ambulatory hospital the aliments which were necessary to him. The reliques of the kitchen, the rejected fragments of the distributions, corrupted meats, were not sufficient. He often went to snatch from the vilest animals the most disgusting meat; he was constantly hunting after cats, dogs, and serpents, which he devoured alive. They were obliged to drive him away, by threats or force, from the chamber of the dead, and from places where the blood drawn from sick persons was deposited. Attempts were repeatedly made to cure him, by giving him alternately, fat substances, acids, opium, and even de la coque du Levant. The disappearance of a child sixteen months old, having excited frightful suspicions against him, he took to flight. But in the year 6, he entered into the Infirmary of Versailles in a consumptive state, which had succeeded to his horrible appetite, and which, according to him, proceeded from a silver fork which had stuck in the intestinal canal. He died in a short time after.

Cit. Tessier, surgeon in chief of that Infirmary, having had the courage to open his body, notwithstanding the insupportable stench which it emitted, could not find the fork. The stomach was of an extraordinary amplitude; the intestines, quite ulcerated, exhibited remarkable renflemens, and the vesicle of the gall was of large dimensions. Tarare was short in size, feeble, and infirm; his aspect had nothing ferocious. When he was fasting, the skin of his belly could almost encircle his body; and when he was fed he appeared as if dropsical; a thick vapour issued in torrents from his mouth; all his whole body smoaked; sweat ran copiously from his head; and, like most voracious animals, he s'assou pissoirt to digest.

Cit. Percy has terminated his memoir by the exposition of the interior organization of the unhappy persons condemned by nature to this exorbitant and cruel appetite; he has explained most of the phenomena which they present; and concludes from the numerous examples of Polyphagy which he has collected, that the unhappy subjects of it most frequently find the end of their miseries in death before the age of forty years.

William Blair, A. M. Member of the Royal College of Surgeons, Fellow of the Medical Societies in London and Paris, Surgeon of the Locke Hospital and Asylum, and of the Bloomsbury Dispensary, Lecturer on the Animal Economy, and on the Clinical Practice of Surgery, will shortly publish an Entire System of Medical and Operative Surgery; comprising the latest improvements in Theory and Practice; with numerous Engravings of Chirurgical Diseases, Operations, and Instruments. Dedicated to the Royal College of Surgeons in London.

Dr. Wittman, of the Royal Artillery, who went from England to Turkey as Surgeon and Medical Assistant to the Military Mission under the command of General Koehler, is preparing for publication an Account of his interesting Travels; to which he will annex Copious Observations on the Plague and on the Diseases

eases of the Turks. His residence of nearly three years in the Turkish army, and his appointment as Physician to the Grand Vizier, qualify him in a peculiar manner for the task he has undertaken.

MEDICAL LECTURES for 1802.

The LECTURES given at the Theatres of the contiguous Hospitals of St. Thomas's and Guy's, for 1802, will commence in the following order:

Anatomy and Surgery, by Mr. CLINE, and Mr. ASTLEY COOEPR, on Friday October 1st, at one o'clock.

Practice of Medicine, by Dr. BABINGTON and Dr. CURRY, on Monday, October 4th, at ten in the morning.

Theory and Practice of Chemistry, by Dr. BABINGTON, and Mr. ALLEN, on Tuesday, October 5th, at ten in the morning.

Theory of Medicine and Materia Medica, by Dr. CURRY, on Tuesday October 5, at seven in the evening.

Midwifery, and Diseases of Women and Children, by Dr. HAIGHTON, on Wednesday, October 6th, at eight in the morning.

Physiology, or Laws of the Animal Œconomy, by Dr. HAIGHTON, on Monday, October 11th, at a quarter before seven in the evening.

Principles and Practice of Surgery, by Mr. ASTLEY COOPER, (illustrated by select cases under his care in Guy's Hospital) on Monday October 11th, at eight o'clock in the evening.

☞ The Lectures are so arranged, that no two of them interfere with each other in the hours of attendance; and the whole is calculated to form a complete Course of Medical and Surgical Instruction.

The following Courses of LECTURES will be delivered at the Medical Theatre, St. Bartholomew's Hospital, during the ensuing winter:

On the Theory and Practice of Medicine, by Dr. ROBERTS and Dr. POWELL.

Clinical Lectures on cases occurring in the Hospital will also be given by Dr. ROBERTS.

On Anatomy and Physiology, by Mr. ABERNETHY.

On comparative Anatomy and Physiology, by Mr. MACARTNEY.

On the Theory and Practice of Surgery, by Mr. ABERNETHY.

On Chemstry and the Materia Medica, by Dr. POWELL.

On Midwifery, and the Diseases of Women and Children, by Dr. THYNNE.

The Anatomical Lectures will begin on the 1st of October, at two o'clock, and the other lectures on the succeeding days; which, with other particulars, may be learned by applying to Mr. Nicholson, at the apothecary's shop, St. Bartholomew's Hospital.

THEATRE OF ANATOMY, GREAT WINDMILL STREET.

Mr. WILSON and Mr. THOMAS will begin the Winter Course of their Lectures on Anatomy, Physiology, Pathology, and Surgery,

gery, on Friday, the 1ſt of October, at two o'clock. Practical Anatomy will be continued in the forenoon, as uſual. Particulars may be known by applying at the Theatre in Windmill Street.

Mr. Brookes's Autumnal Courſe of Lectures on Anatomy, Phyſiology, and Surgery, will commence about the beginning of October, at his Theatre of Anatomy, Blenheim Street.

Mr. Carpue, Surgeon to his Majeſty's Forces, will commence his Anatomical Lectures at his Theatre, in Broad Street, Golden Square, on Monday, the 4th of October.

St. Mary-le-bone Infirmary. — Dr. Hooper will give a Courſe of Lectures on the Theory and Practice of Phyſic and Morbid Anatomy on Mondays, Wedneſdays, and Fridays, at half paſt ſix in the evening; and on the Materia Medica, Tueſdays, Thurſdays, and Saturdays, at half paſt ſeven in the morning.

Dr. Crichton will commence his Autumnal Courſe of Lectures on the Theory and Practice of Phyſic, Chemiſtry, and Materia Medica, on Monday, Oct. 4, 1802.

The Theory and Practice of Phyſic will be taught every day, except Sunday, at eight o'clock in the morning; the Chemiſtry every Monday, Wedneſday, and Friday, at nine; and the Materia Medica every Tueſday, Thurſday, and Saturday, at the ſame hour.

Dr. Bradley (removed from Delahay Street to Parliament Street) will commence his Autumnal Courſe of Lectures on the Theory and Practice of Medicine, on Monday, October 4th, at the Lecture-Room, No. 102, Leadenhall Street, at ſix in the afternoon.

Dr. Wells, one of the Phyſicians to St. Thomas's Hoſpital, purpoſes commencing, in the neighbourhood of that Hoſpital, on Monday the 4th of October, a Courſe of Lectures upon the Practice of Phyſic.

Dr. Rowley intends to give a Courſe of Lectures in Saville Row, on the Ancient and Modern Medicine, with Aphoriſms for Practice.

Dr. Osborn's and Dr. Clarke's Lectures on Midwifery and the Diſeaſes of Women and Children, will in future be read only at Dr. Clarke's Houſe, No. 1, New Burlington Street, Piccadilly.

A Courſe will begin on Monday, October 4, at a quarter paſt ten o'clock, and the Lectures will be continued every day at that hour, for the convenience of ſtudents attending the Hoſpitals. Particulars may be known by applying to Dr. Osborn, or to Dr. Clarke, New Burlington Street, Piccadilly.

Dr. Batty's Courſe of Lectures on the Theory and Practice of Midwifery, will commence on Monday, October 4, 1802, at eleven o'clock in the forenoon, at his houſe in Great Marlborough Street.

On Friday, October 1, Dr. Dennison and Dr. Squire will begin a Courſe of Lectures on the Theory and Practice of Midwifery, and the Diſeaſes of Women and Children.

On

On the first Tuesday evening in October and February, at eight o'clock precisely, Mr. BLAIR will commence a Course of Lectures on Anatomy and Animal Economy. And on the first Friday evening in October and February, at six o'clock precisely, he will commence a Course of Lectures on the Clinical Practice of Surgery.

On Monday, October 4, at seven o'clock in the evening, the Autumnal Course of Lectures on the Principles and Practice of Surgery, will commence in Golden Square, by Mr. JOHN PEARSON, Surgeon of the Lock Hospital, Asylum, &c.

On Monday, October 4, 1802, at seven, P. M. Dr. POLE and Mr. WAGSTAFF will commence their Autumnal Course of Lectures on the Elements and Practice of Midwifery, and Diseases of Women and Children, at their Lecture Room, No. 102, Leadenhall Street, and the subsequent Lectures at eight in the evening.

Lectures on Anatomy, Physiology, and Surgery, by JOHN TAUNTON, Member of the Royal College of Surgeons in London, Surgeon to the City Dispensary, &c.

These Lectures will be given at Mr. TAUNTON's Lecture Room, No. 35, Hatton Garden; the Winter Course to commence on Saturday the 2d day of October, 1802, at eight o'clock in the evening precisely, and be continued every Tuesday, Thursday, and Saturday at the same hour. This Course will consist of from 30 to 40 Lectures. Tickets two guineas. Further particulars may be known by application to Mr. TAUNTON, No. 35, Hatton Garden.

Mr. CHEVALIER, Surgeon to the Westminster General Dispensary, will begin his Autumnal Course of Lectures on the Principles and Operations of Surgery, on Monday the 4th of October, at eight o'clock in the evening, at his house, in South Audley Street, Grosvenor Square, where printed particulars may be had.

N. B. If the Notice of any Lectures is omitted, we shall be glad to insert it in our next; and request it may be addressed to the Publisher.

To CORRESPONDENTS.

Communications are received from Messrs. Davis, Chamberlaine, Luscombe, Bellamy, Shorter, W. P., A Magistrate, Brutus, and N. G.

Those Gentlemen who have sent us Criticisms on Dr. Pearson's Evidence, and whose Papers do not appear in this Number, are informed that the language they have employed is too violent for our Journal. If they should not be satisfied with the moderate Paper which we have inserted, we request that any further Observations from them or others may be written in language not inconsistent with a spirit of liberal inquiry.

We have received several Answers to Mr. Chamberlaine, on the new Medicine Act, and we hope that the Authors are correct, and that Mr. Chamberlaine has been unnecessarily alarmed. But knowing as we do, that Magistrates are generally obliged to inflict penalties according to the Letter *and not according to the* Spirit *of an Act, we are inclined to take Mr. Chamberlaine's side of the argument. As, however, some opinions of high legal authority are shortly expected to be given, respecting particular points of this Act, we think it prudent not to give place to further animadversions till those opinions shall be before the Public.*